

**Supplementary Table 1 | All 191 hit sequences for secreted proteins of the venom gland tissue (VgT) cDNA library.** Contig names with isogroup number and read numbers are given. For each transcript the sequence description based on the results using BLAST nr is given including sequence length, e-value, and mean similarity. BLAST2GO results are shown including Gene ontology terms (GO's) and the InterProScan results (green background highlights positive SignalP results) to identify signalpeptides. Additionally external SignalP search was conducted to identify signal peptides (positive hits are highlighted in blue font color).

| Nr | Contig sequence name  | Isogroup | reads | Sequence description<br>(BLAST nr, E-value=><br>0.0001) | Length<br>(aa pos.) | E-Value | mean<br>Similarity | Gene ontology terms and<br>annotation (GO's)                         | Nr. Of<br>GO's | Interpro scan results (BLAST2GO)   |
|----|---|----------|-------|---|---------------------|---------|--------------------|--|----------------|--|
|    |   |          |       |   |                     |         |                    |  |                | - Green background = SignalP hit in BLAST2GO<br>- SignalP 4.0 results with SignalP 3.1 sensitivity settings<br>(externally identified signal peptides)                           |
| 1  | contig00005_gene_isogroup00001_1<br>ength_1165_3              | 1        | 102   | chitinase 2   | 389                 | 2.3E-57 | 57.50%             | F:catalytic activity   | 1              | IPR001223; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SSF54556 (SUPERFAMILY)   |
| 2  | contig00043_gene_isogroup00001_1<br>ength_791_0               | 1        | 1321  | low-density lipoprotein receptor-<br>related protein 2  | 264                 | 5.4E-35 | 57.70%             | F:scavenger receptor activity;<br>C:integral to membrane; C:membrane | 3              | IPR002172; IPR023415; PR00261 (PRINTS), PTHR10529<br>(PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 3  | contig00056_gene_isogroup00001_1<br>ength_1122_1              | 1        | 2058  | isoform a   | 374                 | 4.5E-43 | 53.60%             | F:hydrolase activity   | 1              | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 4  | contig00072_gene_isogroup00001_1<br>ength_669_5               | 1        | 83    | suppressor of tumorigenicity<br>protein 14              | 223                 | 2E-31   | 51.70%             | -  | 0              | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114;<br>IPR023415; G3DSA:2.40.10.10 (GENE3D),<br>G3DSA:4.10.1220.10 (GENE3D), PTHR24256 (PANTHER),<br>PTHR24256:SF20 (PANTHER) |
| 5  | contig00075_gene_isogroup00001_1<br>ength_1389_4              | 1        | 5839  | suppressor of tumorigenicity 14<br>protein homolog      | 463                 | 8.9E-60 | 49.90%             | -  | 0              | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), PTHR24256:SF20 (PANTHER),<br>tmhmm (TMHMM)        |
| 6  | contig00117_gene_isogroup00001_1<br>ength_662_1               | 1        | 2059  | ---NA---  | 221                 |         |                    | -  | 0              | IPR004169; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM),<br>SSF57059 (SUPERFAMILY)   |
| 7  | contig00124_gene_isogroup00001_1<br>ength_674_1               | 1        | 400   | ---NA---  | 225                 |         |                    | -  | 0              | IPR004169; SSF57059 (SUPERFAMILY)  |
| 8  | contig00153_gene_isogroup00001_1<br>ength_1013_4              | 1        | 190   | chitinase 2   | 338                 | 3.3E-56 | 61.70%             | F:hydrolase activity; P:carbohydrate<br>metabolic process            | 2              | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54556<br>(SUPERFAMILY) |
| 9  | contig00202_gene_isogroup00001_1<br>ength_740_0               | 1        | 28945 | chitinase 2   | 247                 | 1.3E-63 | 61.60%             | F:hydrolase activity; P:metabolic<br>process                         | 2              | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SSF54556 (SUPERFAMILY)  |
| 10 | isotig00044_gene_isogroup00003_le<br>ngth_1180_numContigs_5_5 | 3        | 2341  | isoform a   | 393                 | 4.1E-50 | 56.70%             | F:peptidase activity   | 1              | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 11 | isotig00045_gene_isogroup00003_le<br>ngth_1198_numContigs_6_5 | 3        | 2640  | isoform a   | 399                 | 4.5E-50 | 56.70%             | F:peptidase activity   | 1              | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 12 | isotig00046_gene_isogroup00003_le<br>ngth_1167_numContigs_5_4 | 3        | 2302  | isoform a   | 389                 | 5.9E-50 | 56.70%             | F:hydrolase activity   | 1              | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 13 | isotig00047_gene_isogroup00003_le<br>ngth_1185_numContigs_6_4 | 3        | 2601  | isoform a   | 395                 | 7.3E-50 | 56.70%             | F:hydrolase activity   | 1              | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |

|    |   |   |      |  |     |         |        |                      |   |  |
|----|---|---|------|--|-----|---------|--------|----------------------|---|--|
| 14 | isotig00048_gene_isogroup00003_le<br>ngth_1133_numContigs_5_5 | 3 | 1966 | isoform a  | 377 | 7.9E-51 | 57.20% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 15 | isotig00049_gene_isogroup00003_le<br>ngth_1151_numContigs_5_5 | 3 | 2391 | isoform a  | 383 | 8.2E-51 | 57.20% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 16 | isotig00050_gene_isogroup00003_le<br>ngth_1120_numContigs_5_4 | 3 | 1927 | isoform a  | 373 | 1.3E-50 | 57.40% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 17 | isotig00051_gene_isogroup00003_le<br>ngth_1138_numContigs_5_4 | 3 | 2352 | isoform a  | 379 | 1.4E-50 | 57.40% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 18 | isotig00052_gene_isogroup00003_le<br>ngth_1149_numContigs_5_5 | 3 | 1832 | isoform a  | 383 | 2.8E-50 | 56.90% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 19 | isotig00053_gene_isogroup00003_le<br>ngth_1132_numContigs_2_4 | 3 | 1674 | isoform a  | 377 | 9.2E-49 | 56.60% | F:hydrolase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)  |
| 20 | isotig00054_gene_isogroup00003_le<br>ngth_1136_numContigs_5_4 | 3 | 1793 | isoform a  | 379 | 3.8E-50 | 57.10% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 21 | isotig00055_gene_isogroup00003_le<br>ngth_1299_numContigs_3_0 | 3 | 398  | isoform a  | 433 | 6.6E-49 | 56.80% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 22 | isotig00056_gene_isogroup00003_le<br>ngth_1178_numContigs_4_3 | 3 | 1123 | isoform a  | 393 | 1.4E-49 | 57.30% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 23 | isotig00057_gene_isogroup00003_le<br>ngth_1131_numContigs_3_3 | 3 | 1064 | isoform a  | 377 | 8E-50   | 57.40% | F:peptidase activity | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 24 | isotig00059_gene_isogroup00004_le<br>ngth_1957_numContigs_6_5 | 4 | 7834 | suppressor of tumorigenicity 14<br>protein homolog | 652 | 1.2E-75 | 50.20% | -                    | 0 | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), PTHR24256:SF20 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 25 | isotig00060_gene_isogroup00004_le<br>ngth_1957_numContigs_6_5 | 4 | 8113 | suppressor of tumorigenicity 14<br>protein homolog | 652 | 1.6E-75 | 50.30% | -                    | 0 | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), PTHR24256:SF20 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 26 | isotig00061_gene_isogroup00004_le<br>ngth_1918_numContigs_4_5 | 4 | 6670 | suppressor of tumorigenicity 14<br>protein homolog | 639 | 5.5E-45 | 53.40% | F:catalytic activity | 1 | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114;<br>IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256<br>(PANTHER)   |
| 27 | isotig00062_gene_isogroup00004_le<br>ngth_1918_numContigs_4_5 | 4 | 6949 | suppressor of tumorigenicity 14<br>protein homolog | 639 | 5.8E-45 | 53.40% | F:catalytic activity | 1 | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114;<br>IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256<br>(PANTHER)   |
| 28 | isotig00063_gene_isogroup00004_le<br>ngth_1520_numContigs_7_3 | 4 | 6818 | isoform a  | 507 | 2.5E-22 | 59.20% | F:peptidase activity | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10<br>(GENE3D), PTHR24272 (PANTHER), tmhmm (TMHMM)  |
| 29 | isotig00064_gene_isogroup00004_le<br>ngth_1522_numContigs_7_5 | 4 | 5879 | isoform a  | 507 | 2.3E-22 | 59.20% | F:peptidase activity | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10<br>(GENE3D), PTHR24272 (PANTHER), tmhmm (TMHMM)  |
| 30 | isotig00065_gene_isogroup00004_le<br>ngth_1489_numContigs_6_3 | 4 | 5787 | isoform a  | 497 | 1.7E-22 | 59.20% | F:peptidase activity | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10<br>(GENE3D), PTHR24272 (PANTHER), tmhmm (TMHMM)  |
| 31 | isotig00066_gene_isogroup00004_le<br>ngth_1491_numContigs_6_5 | 4 | 4848 | isoform a  | 497 | 1.4E-22 | 59.20% | F:peptidase activity | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10<br>(GENE3D), PTHR24272 (PANTHER), tmhmm (TMHMM)  |

|    |   |    |      |                        |     |         |        |   |   |  |
|----|---|----|------|------------------------|-----|---------|--------|---|---|--|
| 32 | isotig00067_gene_isogroup00005_le<br>ngth_1173_numContigs_8_1 | 5  | 2982 | plasma kallikrein-like | 391 | 2.9E-39 | 54.90% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 33 | isotig00068_gene_isogroup00005_le<br>ngth_1172_numContigs_7_1 | 5  | 2451 | plasma kallikrein-like | 391 | 2.5E-48 | 56.10% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 34 | isotig00069_gene_isogroup00005_le<br>ngth_1169_numContigs_8_1 | 5  | 2765 | plasma kallikrein-like | 390 | 3.2E-46 | 54.90% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 35 | isotig00070_gene_isogroup00005_le<br>ngth_1165_numContigs_8_2 | 5  | 3316 | plasma kallikrein-like | 388 | 1.3E-39 | 54.90% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 36 | isotig00071_gene_isogroup00005_le<br>ngth_1164_numContigs_7_2 | 5  | 2785 | 26kda protease         | 388 | 9.9E-49 | 56.10% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 37 | isotig00072_gene_isogroup00005_le<br>ngth_1161_numContigs_8_2 | 5  | 3099 | 26kda protease         | 387 | 1.2E-46 | 54.60% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 38 | isotig00073_gene_isogroup00005_le<br>ngth_1138_numContigs_7_1 | 5  | 1840 | plasma kallikrein-like | 379 | 4.4E-49 | 55.70% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 39 | isotig00074_gene_isogroup00005_le<br>ngth_1130_numContigs_7_2 | 5  | 2174 | plasma kallikrein-like | 376 | 6.4E-49 | 55.70% | F:catalytic activity                                      | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 40 | isotig00077_gene_isogroup00007_le<br>ngth_2209_numContigs_5_4 | 7  | 2146 | chitinase 2            | 736 | 3.5E-76 | 63.50% | F:hydrolase activity; P:metabolic<br>process              | 2 | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), SSF54556 (SUPERFAMILY)                   |
| 41 | isotig00078_gene_isogroup00007_le<br>ngth_2223_numContigs_5_4 | 7  | 2126 | chitinase 2            | 741 | 7.3E-76 | 63.50% | F:hydrolase activity; P:metabolic<br>process              | 2 | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54556<br>(SUPERFAMILY) |
| 42 | isotig00079_gene_isogroup00007_le<br>ngth_2211_numContigs_6_5 | 7  | 2118 | chitinase 2            | 737 | 1E-47   | 68.10% | P:carbohydrate metabolic process;<br>F:hydrolase activity | 2 | IPR001223; IPR001579; IPR002557; IPR011583; IPR013781;<br>IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31<br>(PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                  |
| 43 | isotig00080_gene_isogroup00007_le<br>ngth_2225_numContigs_6_5 | 7  | 2098 | chitinase 2            | 741 | 2E-47   | 68.10% | P:carbohydrate metabolic process;<br>F:hydrolase activity | 2 | IPR001223; IPR001579; IPR002557; IPR011583; IPR013781;<br>IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31<br>(PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                  |
| 44 | isotig00081_gene_isogroup00007_le<br>ngth_2210_numContigs_5_5 | 7  | 1842 | chitinase 2            | 736 | 8.6E-76 | 63.60% | F:hydrolase activity; P:metabolic<br>process              | 2 | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54556<br>(SUPERFAMILY) |
| 45 | isotig00082_gene_isogroup00007_le<br>ngth_2224_numContigs_5_5 | 7  | 1822 | chitinase 2            | 741 | 1.6E-75 | 63.50% | F:hydrolase activity; P:metabolic<br>process              | 2 | IPR001223; IPR001579; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54556<br>(SUPERFAMILY) |
| 46 | isotig00092_gene_isogroup00010_le<br>ngth_2698_numContigs_5_4 | 10 | 2945 | chitinase 2            | 899 | 4.8E-98 | 61.70% | F:hydrolase activity; P:metabolic<br>process              | 2 | IPR001223; IPR002557; IPR011583; IPR013781; IPR017853;<br>G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), SSF54556 (SUPERFAMILY)                   |

|    |   |    |      |  |     |         |        |  |   |  |
|----|---|----|------|--|-----|---------|--------|--|---|--|
| 47 | isotig00093_gene_isogroup00010_le<br>ngth_2698_numContigs_4_4 | 10 | 3120 | chitinase 2                                    | 899 | 3.9E-98 | 61.70% | F:hydrolase activity; P:metabolic process                                    | 2 | IPR001223; IPR002557; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54556 (SUPERFAMILY) |
| 48 | isotig00094_gene_isogroup00010_le<br>ngth_2689_numContigs_4_4 | 10 | 3048 | chitinase 2                                    | 896 | 3.5E-98 | 61.70% | F:hydrolase activity; P:metabolic process                                    | 2 | IPR001223; IPR002557; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54556 (SUPERFAMILY) |
| 49 | isotig00095_gene_isogroup00010_le<br>ngth_1192_numContigs_2_4 | 10 | 1101 | obstructor b                                   | 397 | 1.5E-09 | 63.70% | F:chitin binding; P:chitin metabolic process; C:extracellular region         | 3 | IPR002557; PTHR23301 (PANTHER)   |
| 50 | isotig00105_gene_isogroup00014_le<br>ngth_1360_numContigs_5_2 | 14 | 2809 | f-box domain containing protein                | 453 | 2.5E-27 | 41.10% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 51 | isotig00119_gene_isogroup00018_le<br>ngth_2330_numContigs_4_4 | 18 | 1099 | venom serine carboxypeptidase-like             | 777 | 2E-124  | 63.50% | F:hydrolase activity   | 1 | IPR001563; IPR018202; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                                      |
| 52 | isotig00120_gene_isogroup00018_le<br>ngth_2330_numContigs_4_4 | 18 | 1100 | venom serine carboxypeptidase-like             | 777 | 2E-124  | 63.50% | F:hydrolase activity   | 1 | IPR001563; IPR018202; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                                      |
| 53 | isotig00121_gene_isogroup00018_le<br>ngth_2330_numContigs_4_4 | 18 | 1079 | venom serine carboxypeptidase-like             | 777 | 3E-124  | 63.50% | F:hydrolase activity   | 1 | IPR001563; IPR018202; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                                      |
| 54 | isotig00125_gene_isogroup00020_le<br>ngth_1162_numContigs_4_0 | 20 | 2211 | clotting factor b-like                         | 388 | 1.6E-46 | 54.30% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 55 | isotig00126_gene_isogroup00020_le<br>ngth_1162_numContigs_4_0 | 20 | 2884 | clotting factor b-like                         | 388 | 1.5E-46 | 54.50% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 56 | isotig00127_gene_isogroup00020_le<br>ngth_1161_numContigs_4_0 | 20 | 2832 | clotting factor b-like                         | 387 | 9E-44   | 54.80% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)                                    |
| 57 | isotig00139_gene_isogroup00024_le<br>ngth_1686_numContigs_4_4 | 24 | 1564 | isoform a                                      | 562 | 2E-47   | 55.60% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 58 | isotig00140_gene_isogroup00024_le<br>ngth_1274_numContigs_3_4 | 24 | 1226 | isoform a                                      | 425 | 6.4E-49 | 56.00% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 59 | isotig00141_gene_isogroup00024_le<br>ngth_898_numContigs_2_3  | 24 | 591  | serine proteinase stubble                      | 300 | 3.6E-14 | 59.20% | F:hydrolase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 60 | isotig00142_gene_isogroup00025_le<br>ngth_1561_numContigs_3_3 | 25 | 1783 | pdgf- and vegf-related factor 1-like precursor | 521 | 3.7E-39 | 53.20% | F:growth factor activity; P:positive regulation of cell division; C:membrane | 3 | IPR000072; G3DSA:2.10.90.10 (GENE3D), PTHR11633 (PANTHER), PTHR11633-SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF57501 (SUPERFAMILY)                    |
| 61 | isotig00143_gene_isogroup00025_le<br>ngth_1279_numContigs_3_3 | 25 | 1155 | pdgf- and vegf-related factor 1-like precursor | 427 | 3E-10   | 48.38% | F:growth factor activity; P:positive regulation of cell division; C:membrane | 3 | IPR000072; G3DSA:2.10.90.10 (GENE3D), PTHR11633 (PANTHER), PTHR11633-SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF57501 (SUPERFAMILY)                    |
| 62 | isotig00145_gene_isogroup00026_le<br>ngth_1046_numContigs_3_2 | 26 | 14   | adp-ribosylation factor 5                      | 348 | 9E-114  | 93.30% | C:intracellular; F:nucleotide binding; P:signal transduction                 | 3 | IPR003579; IPR005225; IPR006687; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER)  |
| 63 | isotig00147_gene_isogroup00026_le<br>ngth_1013_numContigs_3_2 | 26 | 14   | adp-ribosylation factor 2-like                 | 337 | 5E-103  | 91.20% | C:intracellular; F:nucleotide binding; P:signal transduction                 | 3 | IPR005225; IPR006687; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER)   |

|    |   |    |      |  |     |         |        |  |    |   |
|----|---|----|------|--|-----|---------|--------|--|----|---|
| 64 | isotig00159_gene_isogroup00031_le<br>ngth_2529_numContigs_3_0 | 31 | 713  | matrix metalloproteinase 9                         | 843 | 4.1E-15 | 51.10% | F:carbohydrate binding;<br>F:metalloendopeptidase activity;<br>F:hydrolase activity; F:zinc ion<br>binding; F:metallopeptidase activity;<br>C:extracellular matrix; F:peptidase<br>activity; P:proteolysis; F:metal ion<br>binding; P:metabolic process;<br>P:positive regulation of granuloma<br>formation; P:response to bacterium | 12 | IPR000562; IPR001254; IPR001314; IPR009003; IPR013806;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 65 | isotig00160_gene_isogroup00031_le<br>ngth_2495_numContigs_3_1 | 31 | 428  | matrix metalloproteinase-9                         | 832 | 5.2E-14 | 51.90% | F:carbohydrate binding   | 1  | IPR000562; IPR013806; PTHR22918 (PANTHER),<br>PTHR22918:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 66 | isotig00161_gene_isogroup00032_le<br>ngth_1786_numContigs_3_5 | 32 | 7333 | suppressor of tumorigenicity<br>protein 14         | 595 | 2.2E-75 | 50.80% | -  | 0  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 67 | isotig00162_gene_isogroup00032_le<br>ngth_1785_numContigs_3_5 | 32 | 8674 | st14a protein                                      | 595 | 8.3E-57 | 50.40% | F:catalytic activity   | 1  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), PTHR24256:SF20 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)                         |
| 68 | isotig00165_gene_isogroup00034_le<br>ngth_1331_numContigs_3_4 | 34 | 43   | annexin isoform 1                                  | 444 | 4.5E-47 | 69.50% | F:calcium ion binding; F:calcium-<br>dependent phospholipid binding  | 2  | IPR001464; IPR018252; IPR018502; SignalP-NN(euk)<br>(SIGNALP)   |
| 69 | isotig00166_gene_isogroup00034_le<br>ngth_1331_numContigs_3_4 | 34 | 44   | annexin isoform 1                                  | 444 | 1.1E-46 | 69.50% | F:calcium ion binding; F:calcium-<br>dependent phospholipid binding  | 2  | IPR001464; IPR018252; IPR018502; SignalP-NN(euk)<br>(SIGNALP)   |
| 70 | isotig00167_gene_isogroup00035_le<br>ngth_1183_numContigs_3_2 | 35 | 120  | allergen 5   | 394 | 1.2E-29 | 54.60% | -  | 0  | IPR001283; IPR002413; IPR014044; IPR018244; SignalP-<br>NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 71 | isotig00168_gene_isogroup00035_le<br>ngth_1183_numContigs_3_2 | 35 | 122  | allergen 5   | 394 | 2.2E-30 | 55.00% | -  | 0  | IPR001283; IPR002413; IPR014044; IPR018244; SignalP-<br>NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 72 | isotig00181_gene_isogroup00043_le<br>ngth_2198_numContigs_2_5 | 43 | 3936 | suppressor of tumorigenicity 14<br>protein homolog | 732 | 9.1E-73 | 50.40% | -  | 0  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 73 | isotig00182_gene_isogroup00043_le<br>ngth_1819_numContigs_2_5 | 43 | 4043 | suppressor of tumorigenicity 14<br>protein homolog | 606 | 2.4E-73 | 50.50% | -  | 0  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415;<br>PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D),<br>PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 74 | isotig00183_gene_isogroup00044_le<br>ngth_1968_numContigs_3_3 | 44 | 43   | peptidyl-prolyl cis-trans<br>isomerase fkbp14-like | 656 | 4.8E-94 | 80.00% | P:protein metabolic process;<br>F:calcium ion binding  | 2  | IPR001179; IPR002048; IPR011992; IPR018247; IPR023566;<br>G3DSA:3.10.50.40 (GENE3D), PTHR10516:SF20 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF47473<br>(SUPERFAMILY), SSF54534 (SUPERFAMILY) |
| 75 | isotig00184_gene_isogroup00044_le<br>ngth_1795_numContigs_2_3 | 44 | 45   | peptidyl-prolyl cis-trans<br>isomerase fkbp14-like | 599 | 9.2E-96 | 81.60% | P:protein metabolic process;<br>F:calcium ion binding  | 2  | IPR001179; IPR002048; IPR011992; IPR018247; IPR023566;<br>G3DSA:3.10.50.40 (GENE3D), PTHR10516:SF20 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF47473<br>(SUPERFAMILY), SSF54534 (SUPERFAMILY) |
| 76 | isotig00185_gene_isogroup00045_le<br>ngth_1937_numContigs_2_4 | 45 | 144  | suppressor of tumorigenicity 14<br>protein homolog | 646 | 7.7E-44 | 52.00% | P:biological_process; P:response to<br>external stimulus; P:response to<br>stress; F:catalytic activity  | 4  | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114;<br>IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256<br>(PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 77 | isotig00186_gene_isogroup00045_le<br>ngth_1798_numContigs_2_4 | 45 | 143  | suppressor of tumorigenicity 14<br>protein homolog | 599 | 6.4E-44 | 52.40% | P:biological_process; P:response to<br>external stimulus; P:response to<br>stress; F:catalytic activity  | 4  | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114;<br>IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256<br>(PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|    |   |     |      |   |     |         |        |  |   |   |
|----|---|-----|------|---|-----|---------|--------|--|---|---|
| 78 | isotig00191_gene_isogroup00048_le<br>ngth_1578_numContigs_2_4 | 48  | 168  | glyceraldehyde-3-phosphate<br>dehydrogenase | 526 | 0       | 89.90% | F:nucleotide binding; P:carbohydrate<br>metabolic process; F:catalytic<br>activity; P:metabolic process  | 4 | IPR006424; IPR016040; IPR020828; IPR020829; IPR020830;<br>IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF51735<br>(SUPERFAMILY), SSF55347 (SUPERFAMILY)  |
| 79 | isotig00192_gene_isogroup00048_le<br>ngth_1423_numContigs_2_4 | 48  | 179  | glyceraldehyde-3-phosphate<br>dehydrogenase | 474 | 0       | 90.20% | F:nucleotide binding; P:carbohydrate<br>metabolic process; F:catalytic<br>activity; P:metabolic process  | 4 | IPR006424; IPR016040; IPR020828; IPR020829; IPR020830;<br>IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF51735<br>(SUPERFAMILY), SSF55347 (SUPERFAMILY)  |
| 80 | isotig00195_gene_isogroup00050_le<br>ngth_1574_numContigs_2_1 | 50  | 28   | leukocyte elastase inhibitor                | 525 | 4.8E-85 | 62.30% | C:extracellular space  | 1 | IPR000215; IPR023796; G3DSA:2.30.39.10 (GENE3D),<br>G3DSA:3.30.497.10 (GENE3D)  |
| 81 | isotig00196_gene_isogroup00050_le<br>ngth_1413_numContigs_2_1 | 50  | 28   | leukocyte elastase inhibitor                | 471 | 1E-90   | 61.50% | C:extracellular space  | 1 | IPR000215; IPR023795; IPR023796; G3DSA:2.30.39.10<br>(GENE3D), G3DSA:3.30.497.10 (GENE3D)   |
| 82 | isotig00199_gene_isogroup00052_le<br>ngth_2084_numContigs_2_4 | 52  | 210  | disulfide isomerase                         | 695 | 0       | 82.70% | F:electron carrier activity; P:cellular<br>homeostasis; P:regulation of<br>biological process; P:metabolic<br>process; F:catalytic activity;<br>F:transferase activity; C:endoplasmic<br>reticulum | 7 | IPR005746; IPR005788; IPR005792; IPR012336; IPR013766;<br>IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32<br>(PANTHER), PF13848 (PFAM), SignalP-NN(euk) (SIGNALP),<br>tmhmm (TMHMM)  |
| 83 | isotig00209_gene_isogroup00057_le<br>ngth_1276_numContigs_3_4 | 57  | 72   | carboxypeptidase                            | 425 | 3.4E-59 | 63.00% | -  | 0 | IPR000834; IPR003146; IPR009020; G3DSA:3.40.630.10<br>(GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk)<br>(SIGNALP), SSF53187 (SUPERFAMILY)   |
| 84 | isotig00210_gene_isogroup00057_le<br>ngth_1219_numContigs_2_4 | 57  | 71   | carboxypeptidase                            | 406 | 2.4E-59 | 62.80% | -  | 0 | IPR000834; IPR003146; IPR009020; G3DSA:3.40.630.10<br>(GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk)<br>(SIGNALP), SSF53187 (SUPERFAMILY)   |
| 85 | isotig00213_gene_isogroup00059_le<br>ngth_1402_numContigs_2_1 | 59  | 6019 | coagulation factor xi                       | 467 | 7.7E-41 | 54.30% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)   |
| 86 | isotig00214_gene_isogroup00059_le<br>ngth_1004_numContigs_2_1 | 59  | 4798 | secreted salivary gland                     | 335 | 1.8E-29 | 54.20% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24258 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)   |
| 87 | isotig00235_gene_isogroup00070_le<br>ngth_855_numContigs_2_5  | 70  | 237  | ---NA---                                    | 285 |         |        | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D),<br>PTHR24268 (PANTHER), PTHR24268:SF30 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 88 | isotig00236_gene_isogroup00070_le<br>ngth_795_numContigs_2_5  | 70  | 262  | ---NA---                                    | 265 |         |        | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D),<br>PTHR24268 (PANTHER), PTHR24268:SF30 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 89 | isotig00273_gene_isogroup00089_le<br>ngth_600_numContigs_3_4  | 89  | 10   | thioredoxin-1                               | 200 | 2.5E-51 | 83.40% | P:cellular homeostasis; P:regulation<br>of biological process; F:electron<br>carrier activity; F:catalytic activity;<br>P:metabolic process  | 5 | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-<br>NN(euk) (SIGNALP)   |
| 90 | isotig00274_gene_isogroup00089_le<br>ngth_495_numContigs_2_4  | 89  | 14   | thioredoxin-like protein                    | 165 | 2E-24   | 82.00% | P:cellular homeostasis; P:regulation<br>of biological process; F:electron<br>carrier activity; F:catalytic activity;<br>P:metabolic process  | 5 | IPR005746; IPR012336; IPR013766; SignalP-NN(euk)<br>(SIGNALP), tmhmm (TMHMM)  |
| 91 | isotig00326_gene_isogroup00117_le<br>ngth_2441_numContigs_1_0 | 117 | 70   | y-box factor-like protein                   | 814 | 1.1E-37 | 89.90% | F:DNA binding; P:regulation of<br>biological process;  | 3 | IPR002059; IPR011129; IPR012340; IPR019844; PTHR11544<br>(PANTHER), PTHR11544:SF8 (PANTHER), tmhmm<br>(TMHMM)   |
| 92 | isotig00328_gene_isogroup00119_le<br>ngth_2317_numContigs_1_3 | 119 | 329  | heat shock 70 kda protein<br>cognate 4      | 773 | 0       | 96.30% | -  | 0 | IPR013126; IPR018181; G3DSA:1.20.1270.10 (GENE3D),<br>G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.30.30 (GENE3D),<br>G3DSA:3.30.420.40 (GENE3D), G3DSA:3.90.640.10<br>(GENE3D), PTHR19375 (PANTHER), SignalP-NN(euk)<br>(SIGNALP), tmhmm (TMHMM), SSF100920 (SUPERFAMILY),<br>SSF100934 (SUPERFAMILY), SSF53067 (SUPERFAMILY) |

|     |   |      |      |  |     |         |        |  |   |  |
|-----|---|------|------|--|-----|---------|--------|--|---|--|
| 93  | isotig00330_gene_isogroup00121_le<br>ngth_2210_numContigs_1_4 | 121  | 891  | plasma kallikrein-like                             | 737 | 3.1E-40 | 52.80% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 94  | isotig00331_gene_isogroup00122_le<br>ngth_2182_numContigs_1_2 | 122  | 57   | protein disulfide-isomerase a3-<br>like            | 727 | 0       | 78.50% | F:electron carrier activity; P:cellular<br>homeostasis; P:regulation of<br>biological process; P:metabolic<br>process; F:catalytic activity;<br>F:transferase activity; C:endoplasmic<br>reticulum | 7 | IPR005746; IPR005788; IPR005792; IPR012336; IPR013766;<br>IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32<br>(PANTHER), PF13848 (PFAM), SignalP-NN(euk) (SIGNALP),<br>tmhmm (TMHMM)   |
| 95  | isotig00332_gene_isogroup00123_le<br>ngth_2124_numContigs_1_1 | 123  | 21   | zinc metalloprotease                               | 708 | 5E-116  | 61.90% | P:proteolysis; F:peptidase activity;<br>F:metalloendopeptidase activity;<br>F:metallopeptidase activity  | 4 | IPR001570; IPR007280; IPR013856; IPR023612;<br>G3DSA:1.10.390.10 (GENE3D), SSF55486 (SUPERFAMILY)  |
| 96  | isotig00333_gene_isogroup00124_le<br>ngth_2101_numContigs_1_2 | 124  | 112  | membrane metallo-<br>endopeptidase-like 1-like     | 700 | 0       | 66.80% | -  | 0 | IPR000718; IPR008753; IPR018497; IPR024079; SSF55486<br>(SUPERFAMILY)  |
| 97  | isotig00336_gene_isogroup00127_le<br>ngth_2085_numContigs_1_4 | 127  | 143  | ---NA---   | 695 |         |        | -  | 0 | IPR000436; IPR002035; G3DSA:2.10.70.10 (GENE3D),<br>PTHR10579 (PANTHER), PTHR10579:SF4 (PANTHER),<br>tmhmm (TMHMM), SSF53300 (SUPERFAMILY)   |
| 98  | isotig00338_gene_isogroup00129_le<br>ngth_2045_numContigs_1_1 | 129  | 148  | enolase  | 682 | 0       | 89.40% | C:cytosol; C:protein complex;<br>F:catalytic activity; F:binding;<br>P:carbohydrate metabolic process;<br>P:generation of precursor metabolites<br>and energy; P:catabolic process                 | 7 | IPR000941; IPR020809; IPR020810; IPR020811;<br>G3DSA:3.20.20.120 (GENE3D), G3DSA:3.30.390.10<br>(GENE3D), tmhmm (TMHMM), SSF51604 (SUPERFAMILY),<br>SSF54826 (SUPERFAMILY)   |
| 99  | isotig00340_gene_isogroup00131_le<br>ngth_2033_numContigs_1_4 | 1313 | 59   | peptidyl-prolyl cis-trans<br>isomerase 5           | 678 | 9E-100  | 89.20% | P:protein metabolic process;<br>P:cellular protein modification<br>process; F:catalytic activity   | 3 | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D),<br>PTHR11071 (PANTHER), PTHR11071:SF63 (PANTHER),<br>SignalP-NN(euk) (SIGNALP)   |
| 100 | isotig00343_gene_isogroup00134_le<br>ngth_1981_numContigs_1_4 | 134  | 1616 | suppressor of tumorigenicity 14<br>protein homolog | 600 | 3.3E-61 | 43.70% | -  | 0 | IPR001254; IPR002172; IPR009003; IPR023415; PR00261<br>(PRINTS), G3DSA:2.40.10.10 (GENE3D), PTHR10529<br>(PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 101 | isotig00345_gene_isogroup00136_le<br>ngth_1965_numContigs_1_1 | 136  | 78   | gamma-glutamyltransferase<br>1-like                | 655 | 0       | 65.70% | F:gamma-glutamyltransferase activity   | 1 | IPR000101; SignalP-NN(euk) (SIGNALP), SSF56235<br>(SUPERFAMILY)  |
| 102 | isotig00346_gene_isogroup00137_le<br>ngth_1948_numContigs_1_1 | 137  | 84   | plasminogen activator spa                          | 649 | 2.6E-59 | 55.70% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER),<br>tmhmm (TMHMM)  |
| 103 | isotig00347_gene_isogroup00138_le<br>ngth_1946_numContigs_1_4 | 138  | 237  | calreticulin                                       | 649 | 9E-173  | 87.00% | -  | 0 | IPR001580; IPR008985; IPR013320; IPR018124; SignalP-<br>NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 104 | isotig00348_gene_isogroup00139_le<br>ngth_1937_numContigs_1_0 | 139  | 69   | aldehyde mitochondrial-like<br>isoform 1           | 646 | 0       | 81.60% | F:catalytic activity; P:metabolic<br>process   | 2 | IPR015590; IPR016160; IPR016161; IPR016162; IPR016163;<br>PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER),<br>tmhmm (TMHMM)  |
| 105 | isotig00349_gene_isogroup00140_le<br>ngth_1932_numContigs_1_1 | 140  | 58   | heat shock cognate 70-2 protein                    | 644 | 0       | 96.00% | F:nucleotide binding   | 1 | IPR013126; IPR018181; G3DSA:1.20.1270.10 (GENE3D),<br>G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D),<br>G3DSA:3.90.640.10 (GENE3D), PTHR19375 (PANTHER),<br>tmhmm (TMHMM), SSF100920 (SUPERFAMILY), SSF100934<br>(SUPERFAMILY), SSF53067 (SUPERFAMILY) |
| 106 | isotig00357_gene_isogroup00148_le<br>ngth_1894_numContigs_1_4 | 148  | 120  | chitinase 2  | 631 | 2E-120  | 59.30% | F:catalytic activity   | 1 | IPR001223; IPR001579; IPR002557; IPR011583; IPR013781;<br>IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177<br>(PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm<br>(TMHMM), SSF54556 (SUPERFAMILY)  |
| 107 | isotig00361_gene_isogroup00152_le<br>ngth_1826_numContigs_1_2 | 152  | 44   | myosin heavy muscle                                | 608 | 2.6E-89 | 93.70% | C:cytoskeleton; C:protein complex;<br>F:motor activity   | 3 | IPR002928; PTHR13140 (PANTHER), PTHR13140:SF106<br>(PANTHER), tmhmm (TMHMM)  |

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| 108 | isotig00362_gene_isogroup00153_le<br>ngth_1816_numContigs_1_5 | 153 | 24   | gamma-glutamyl hydrolase-like                   | 605 | 3.5E-80 | 65.10% | F:peptidase activity; P:metabolic process  | 2  | IPR011697; IPR015527; G3DSA:3.40.50.880 (GENE3D), PTHR11315:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF52317 (SUPERFAMILY)                       |
| 109 | isotig00366_gene_isogroup00157_le<br>ngth_1805_numContigs_1_4 | 157 | 138  | tissue factor pathway inhibitor 2               | 602 | 1.1E-23 | 60.30% | F:peptidase inhibitor activity; P:blood coagulation; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; F:metallopeptidase activity; C:extracellular matrix; F:zinc ion binding; C:proteinaceous extracellular matrix; F:metalloendopeptidase activity   | 10 | IPR002223; IPR020901; PTHR10083 (PANTHER), tmhmm (TMHMM)  |
| 110 | isotig00369_gene_isogroup00160_le<br>ngth_1795_numContigs_1_5 | 160 | 1583 | suppressor of tumorigenicity 14 protein homolog | 598 | 7.3E-75 | 50.80% | -  | 0  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415; PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 111 | isotig00371_gene_isogroup00162_le<br>ngth_1771_numContigs_1_3 | 162 | 665  | muscle protein 20-like protein                  | 591 | 2.5E-83 | 80.00% | -  | 0  | IPR000557; IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER), PTHR18959:SF3 (PANTHER)  |
| 112 | isotig00372_gene_isogroup00163_le<br>ngth_1756_numContigs_1_4 | 163 | 27   | low quality protein: twitchin-like              | 585 | 8.4E-95 | 76.00% | F:protein kinase activity  | 1  | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; IPR020675; PTHR22964:SF3 (PANTHER), tmhmm (TMHMM), SSF48726 (SUPERFAMILY)                                  |
| 113 | isotig00374_gene_isogroup00165_le<br>ngth_1743_numContigs_1_5 | 165 | 45   | cathepsin b                                     | 581 | 4E-162  | 78.20% | P:protein metabolic process; P:catabolic process; P:biological_process; F:peptidase activity   | 4  | IPR000169; IPR000668; IPR012599; IPR013128; IPR015643; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                     |
| 114 | isotig00384_gene_isogroup00175_le<br>ngth_1639_numContigs_1_0 | 175 | 15   | angiotensin-converting enzyme                   | 547 | 2E-180  | 74.50% | P:regulation of biological process; P:protein metabolic process; P:catabolic process; F:peptidase activity; P:biological_process; P:response to external stimulus; F:binding; P:multicellular organismal development; C:cell; F:receptor binding; P:transport; C:extracellular space; F:actin binding; C:plasma membrane; C:endosome; P:cell differentiation; P:response to stress; P:anatomical structure morphogenesis; P:cell proliferation | 19 | IPR001548; SSF55486 (SUPERFAMILY)   |
| 115 | isotig00389_gene_isogroup00180_le<br>ngth_1617_numContigs_1_3 | 180 | 117  | suppressor of tumorigenicity 14 protein homolog | 539 | 9.5E-52 | 49.60% | -  | 0  | IPR001254; IPR002172; IPR009003; IPR018114; IPR023415; PR00261 (PRINTS), G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)                |
| 116 | isotig00390_gene_isogroup00181_le<br>ngth_1600_numContigs_1_1 | 181 | 17   | cathepsin l-like                                | 533 | 2E-102  | 85.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000169; IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                           |
| 117 | isotig00393_gene_isogroup00184_le<br>ngth_1579_numContigs_1_5 | 184 | 37   | c-type lectin                                   | 526 | 4.2E-30 | 50.00% | F:catalytic activity   | 1  | IPR001223; IPR002557; IPR013781; IPR017853; PTHR11177 (PANTHER), tmhmm (TMHMM)  |
| 118 | isotig00395_gene_isogroup00186_le<br>ngth_1565_numContigs_1_4 | 186 | 549  | neurogenic locus                                | 522 | 4.2E-10 | 49.17% | F:calcium ion binding; F:transferase activity; F:hydrolase activity; F:transmembrane receptor protein tyrosine kinase activity   | 4  | IPR000436; IPR002035; G3DSA:2.10.70.10 (GENE3D), PTHR10579 (PANTHER), PTHR10579:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53300 (SUPERFAMILY)   |



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| 119 | isotig00397_gene_isogroup00188_le<br>ngth_1557_numContigs_1_3 | 188 | 23   | superoxide dismutase                               | 519 | 3.4E-52 | 86.90% | -  | 0 | IPR001424; IPR018152; IPR024134; tmhmm (TMHMM)   |
| 120 | isotig00400_gene_isogroup00191_le<br>ngth_1523_numContigs_1_5 | 191 | 89   | ame: full=otogelin-like protein                    | 507 | 1.4E-11 | 45.50% | P:cell adhesion; C:extracellular region  | 2 | IPR001007; IPR006207; PTHR11339 (PANTHER), PTHR11339:SF42 (PANTHER), tmhmm (TMHMM), SSF57603 (SUPERFAMILY)   |
| 121 | isotig00401_gene_isogroup00192_le<br>ngth_1514_numContigs_1_4 | 192 | 80   | low quality protein: mucin-5ac                     | 505 | 3.2E-16 | 44.70% | P:cell adhesion  | 1 | IPR001007; IPR006207; PTHR11339 (PANTHER), PTHR11339:SF25 (PANTHER), SSF57603 (SUPERFAMILY)  |
| 122 | isotig00403_gene_isogroup00194_le<br>ngth_1493_numContigs_1_3 | 194 | 14   | low-density lipoprotein receptor-related protein 2 | 498 | 8.7E-22 | 50.10% | F:calcium ion binding; F:receptor activity; C:integral to membrane; C:membrane   | 4 | IPR000152; IPR000436; IPR000742; IPR001254; IPR001881; IPR002172; IPR009003; IPR013032; IPR018097; IPR018114; IPR023415; IPR026823; PR00261 (PRINTS), G3DSA:2.10.25.10 (GENE3D), G3DSA:2.10.70.10 (GENE3D), G3DSA:2.40.10.10 (GENE3D), PTHR10529 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF57196 (SUPERFAMILY) |
| 123 | isotig00407_gene_isogroup00198_le<br>ngth_1468_numContigs_1_3 | 198 | 632  | transmembrane protease serine 6                    | 490 | 2.5E-44 | 49.30% | -  | 0 | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114; IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 124 | isotig00409_gene_isogroup00200_le<br>ngth_1463_numContigs_1_1 | 200 | 1046 | carboxypeptidase b-like                            | 488 | 6E-127  | 63.00% | -  | 0 | IPR000834; IPR003146; IPR009020; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF53187 (SUPERFAMILY)  |
| 125 | isotig00410_gene_isogroup00201_le<br>ngth_1458_numContigs_1_4 | 201 | 1322 | carboxypeptidase b-like                            | 486 | 9E-122  | 63.20% | -  | 0 | IPR000834; IPR003146; IPR009020; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)   |
| 126 | isotig00413_gene_isogroup00204_le<br>ngth_1450_numContigs_1_4 | 204 | 86   | cyclophilin a                                      | 483 | 8E-99   | 92.90% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 127 | isotig00414_gene_isogroup00205_le<br>ngth_1450_numContigs_1_4 | 205 | 49   | phospholipid-hydroperoxide glutathione peroxidase  | 483 | 8.3E-80 | 79.80% | F:antioxidant activity; F:catalytic activity; P:response to stress; P:metabolic process  | 4 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 128 | isotig00416_gene_isogroup00207_le<br>ngth_1440_numContigs_1_4 | 207 | 10   | clotting factor b-like                             | 480 | 1E-65   | 61.90% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)   |
| 129 | isotig00422_gene_isogroup00213_le<br>ngth_1413_numContigs_1_4 | 213 | 52   | carboxypeptidase b                                 | 471 | 2E-119  | 63.00% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion binding   | 4 | IPR000834; IPR003146; IPR009020; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF53187 (SUPERFAMILY)  |
| 130 | isotig00423_gene_isogroup00214_le<br>ngth_1403_numContigs_1_3 | 214 | 16   | isoform c  | 468 | 2.9E-34 | 59.60% | -  | 0 | IPR002172; IPR023415; PTHR10529 (PANTHER), tmhmm (TMHMM)   |
| 131 | isotig00426_gene_isogroup00217_le<br>ngth_1405_numContigs_1_2 | 217 | 3658 | transmembrane protease serine 6                    | 468 | 9.1E-43 | 49.40% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114; IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 132 | isotig00439_gene_isogroup00230_le<br>ngth_1333_numContigs_1_2 | 230 | 25   | prepro-ion transport peptide                       | 444 | 1.1E-29 | 77.80% | -  | 0 | IPR000346; IPR001166; IPR018251; tmhmm (TMHMM)   |
| 133 | isotig00447_gene_isogroup00238_le<br>ngth_1310_numContigs_1_0 | 238 | 12   | ferritin 1-like protein a                          | 437 | 4.5E-46 | 64.80% | P:oxidation-reduction process; P:cellular iron ion homeostasis; F:oxidoreductase activity; F:transition metal ion binding; F:ferric iron binding; P:iron ion transport | 6 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; PTHR11431:SF5 (PANTHER), tmhmm (TMHMM)  |

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| 134 | isotig00450_gene_isogroup00241_le<br>ngth_1289_numContigs_1_2 | 241 | 41   | ferritin                               | 429 | 1.6E-83 | 84.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; IPR014034; tmhmm (TMHMM)   |
| 135 | isotig00454_gene_isogroup00245_le<br>ngth_1279_numContigs_1_4 | 245 | 78   | granulin- partial                      | 426 | 6.4E-35 | 50.10% | C:mitochondrion; P:embryo implantation; P:blastocyst hatching; P:positive regulation of epithelial cell proliferation                           | 4 | <a href="#">IPR000118</a> ; <a href="#">PTHR12274 (PANTHER)</a> , <a href="#">PTHR12274:SF0 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF57277 (SUPERFAMILY)</a>  |
| 136 | isotig00456_gene_isogroup00247_le<br>ngth_1251_numContigs_1_0 | 247 | 9    | ---NA---                               | 417 |         |        | -   | 0 | <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 137 | isotig00457_gene_isogroup00248_le<br>ngth_1241_numContigs_1_5 | 248 | 109  | tandem repeat galectin                 | 413 | 5.5E-50 | 52.10% | F:carbohydrate binding  | 1 | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)  |
| 138 | isotig00462_gene_isogroup00253_le<br>ngth_1229_numContigs_1_4 | 253 | 42   | thioredoxin peroxidase                 | 410 | 4E-137  | 87.00% | P:metabolic process; F:antioxidant activity; F:catalytic activity   | 3 | <a href="#">IPR000866</a> ; <a href="#">IPR012336</a> ; <a href="#">IPR019479</a> ; <a href="#">PTHR10681 (PANTHER)</a> , <a href="#">PTHR10681:SF46 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>                              |
| 139 | isotig00466_gene_isogroup00257_le<br>ngth_1208_numContigs_1_5 | 257 | 674  | chymotrypsinogen 2-like                | 402 | 4E-46   | 56.60% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24258 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |
| 140 | isotig00468_gene_isogroup00259_le<br>ngth_1197_numContigs_1_5 | 259 | 38   | plasma kallikrein-like                 | 399 | 2.1E-40 | 52.70% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24272 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>                                 |
| 141 | isotig00471_gene_isogroup00262_le<br>ngth_1192_numContigs_1_3 | 262 | 561  | proclotting enzyme                     | 398 | 1.1E-48 | 54.80% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24265 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |
| 142 | isotig00473_gene_isogroup00264_le<br>ngth_1188_numContigs_1_4 | 264 | 44   | plasma kallikrein                      | 396 | 2.3E-40 | 53.50% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24258 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |
| 143 | isotig00474_gene_isogroup00265_le<br>ngth_1183_numContigs_1_4 | 265 | 775  | serine protease                        | 394 | 3.1E-40 | 52.60% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24260 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 144 | isotig00475_gene_isogroup00266_le<br>ngth_1178_numContigs_1_1 | 266 | 1037 | transmembrane protease serine<br>4     | 393 | 3.8E-37 | 51.00% | P:proteolysis; F:serine-type endopeptidase activity; F:scavenger receptor activity; C:integral to membrane; C:membrane; F:catalytic activity    | 6 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24258 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>                                 |
| 145 | isotig00477_gene_isogroup00268_le<br>ngth_1175_numContigs_1_3 | 268 | 25   | steroid dehydrogenase                  | 392 | 3E-115  | 69.20% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding; F:estradiol 17-beta-dehydrogenase activity | 5 | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF68 (PANTHER), <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF51735 (SUPERFAMILY)</a>  |
| 146 | isotig00478_gene_isogroup00269_le<br>ngth_1173_numContigs_1_3 | 269 | 21   | serine protease                        | 391 | 5.1E-30 | 48.10% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24268 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>                             |
| 147 | isotig00480_gene_isogroup00271_le<br>ngth_1162_numContigs_1_3 | 271 | 21   | hemocyanin subunit type 1<br>precursor | 388 | 0       | 75.00% | -   | 0 | IPR002227; IPR005203; IPR008922; IPR013788; IPR014756; <a href="#">tmhmm (TMHMM)</a>  |
| 148 | isotig00483_gene_isogroup00274_le<br>ngth_1137_numContigs_1_2 | 274 | 11   | annulin-like isoform 2                 | 379 | 9E-120  | 74.50% | -   | 0 | IPR002931; IPR008958; IPR013783; IPR023608; <a href="#">PTHR11590:SF16 (PANTHER)</a> , <a href="#">SSF54001 (SUPERFAMILY)</a>   |
| 149 | isotig00487_gene_isogroup00278_le<br>ngth_1128_numContigs_1_5 | 278 | 171  | plasminogen activator spa              | 376 | 9.7E-45 | 56.30% | F:catalytic activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24258 (PANTHER)</a>   |
| 150 | isotig00488_gene_isogroup00279_le<br>ngth_1127_numContigs_1_4 | 279 | 83   | plasma kallikrein-like                 | 376 | 9.8E-41 | 53.80% | P:biological process; P:response to external stimulus; P:response to stress; F:catalytic activity   | 4 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24260 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |

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|-----|---|-----|-----|---|-----|---------|--------|--|---|--|
| 151 | isotig00492_gene_isogroup00283_le<br>ngth_1124_numContigs_1_5 | 283 | 17  | projectin short variant   | 374 | 9E-122  | 73.60% | -  | 0 | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; SSF48726 (SUPERFAMILY)  |
| 152 | isotig00496_gene_isogroup00287_le<br>ngth_1112_numContigs_1_3 | 287 | 759 | transmembrane serine protease   | 371 | 4.8E-45 | 53.70% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 153 | isotig00497_gene_isogroup00288_le<br>ngth_1110_numContigs_1_3 | 288 | 11  | glrx3_xentr ame:<br>full=glutaredoxin-3 ame:<br>full=thioredoxin-like protein 2 | 370 | 1E-142  | 77.20% | P:cellular homeostasis; P:regulation of biological process; C:cytoplasm; F:electron carrier activity; F:catalytic activity                   | 5 | IPR002109; IPR004480; IPR012336; IPR013766; PTHR10293:SF17 (PANTHER)   |
| 154 | isotig00500_gene_isogroup00291_le<br>ngth_1107_numContigs_1_0 | 291 | 13  | thioredoxin peroxidase  | 369 | 9.3E-59 | 88.20% | -  | 0 | IPR000866; IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)   |
| 155 | isotig00504_gene_isogroup00295_le<br>ngth_1103_numContigs_1_1 | 295 | 6   | beta 1-like 2   | 368 | 4E-113  | 66.40% | F:hydrolase activity   | 1 | IPR001944; IPR013781; IPR017853; IPR019801; PTHR23421:SF14 (PANTHER)   |
| 156 | isotig00513_gene_isogroup00304_le<br>ngth_1078_numContigs_1_5 | 304 | 8   | serine protease 56-like   | 359 | 2.7E-10 | 48.60% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24261 (PANTHER), PTHR24261:SF9 (PANTHER)  |
| 157 | isotig00515_gene_isogroup00306_le<br>ngth_1073_numContigs_1_5 | 306 | 196 | ves g 5 allergen  | 357 | 7.6E-39 | 49.50% | C:extracellular region   | 1 | IPR001283; IPR002413; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 158 | isotig00521_gene_isogroup00312_le<br>ngth_1051_numContigs_1_1 | 312 | 12  | predicted protein   | 350 | 2.6E-07 | 46.00% | P:neuropeptide signaling pathway   | 1 | no IPS match   |
| 159 | isotig00531_gene_isogroup00322_le<br>ngth_1039_numContigs_1_4 | 322 | 23  | selenium-dependent glutathione peroxidase                                       | 346 | 3.7E-87 | 78.60% | -  | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 160 | isotig00538_gene_isogroup00329_le<br>ngth_1025_numContigs_1_0 | 329 | 507 | ves g 5 allergen  | 342 | 1.5E-43 | 51.60% | C:extracellular region   | 1 | IPR001283; IPR002413; IPR014044; IPR018244; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 161 | isotig00539_gene_isogroup00330_le<br>ngth_1022_numContigs_1_4 | 330 | 27  | virulence metalloprotease   | 341 | 6.3E-15 | 53.90% | F:metal ion binding; P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:peptidase activity; F:metalloendopeptidase activity | 6 | IPR025711; tmhmm (TMHMM)   |
| 162 | isotig00543_gene_isogroup00334_le<br>ngth_1012_numContigs_1_5 | 334 | 15  | acyl- -binding domain-containing protein 6                                      | 337 | 2.7E-69 | 63.70% | F:fatty-acyl-CoA binding; F:lipid binding; C:cytoplasm; P:proteolysis; F:aspartic-type endopeptidase activity                                | 5 | IPR000582; IPR002110; IPR014352; IPR020683; PTHR24119 (PANTHER), PTHR24119:SF0 (PANTHER)   |
| 163 | isotig00553_gene_isogroup00344_le<br>ngth_986_numContigs_1_3  | 344 | 14  | chitinase 1   | 329 | 1.7E-56 | 56.70% | F:catalytic activity   | 1 | IPR001223; IPR002557; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)                   |
| 164 | isotig00554_gene_isogroup00345_le<br>ngth_984_numContigs_1_5  | 345 | 177 | anti-lipopolysaccharide factor  | 328 | 1.3E-32 | 73.40% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 165 | isotig00557_gene_isogroup00348_le<br>ngth_978_numContigs_1_3  | 348 | 8   | upf0670 protein cg4666-like isoform 1   | 326 | 4.4E-26 | 57.60% | -  | 0 | G3DSA:3.10.129.10 (GENE3D), PTHR12475 (PANTHER), PF13279 (PFAM), tmhmm (TMHMM), SSF54637 (SUPERFAMILY)                               |
| 166 | isotig00565_gene_isogroup00356_le<br>ngth_954_numContigs_1_1  | 356 | 8   | inactive hydroxysteroid dehydrogenase-like protein 1                            | 318 | 3E-102  | 69.90% | -  | 0 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24316 (PANTHER), PTHR24316:SF68 (PANTHER), SSF51735 (SUPERFAMILY)                    |
| 167 | isotig00577_gene_isogroup00368_le<br>ngth_931_numContigs_1_3  | 368 | 15  | si:dkey- protein  | 311 | 6.5E-42 | 59.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 168 | isotig00586_gene_isogroup00377_le<br>ngth_911_numContigs_1_5  | 377 | 11  | long form-like  | 303 | 1.1E-69 | 88.00% | C:cytoskeleton; C:protein complex; F:motor activity  | 3 | IPR002928; IPR007999; PTHR13140 (PANTHER), PTHR13140:SF11 (PANTHER)  |
| 169 | isotig00592_gene_isogroup00383_le<br>ngth_899_numContigs_1_0  | 383 | 30  | proclotting enzyme-like   | 300 | 4.2E-43 | 56.60% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)   |
| 170 | isotig00599_gene_isogroup00390_le<br>ngth_869_numContigs_1_1  | 390 | 13  | ubiquitin c   | 290 | 1.9E-94 | 94.60% | -  | 0 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                   |

|     |  |     |    |   |     |         |        |   |    |  |
|-----|--|-----|----|---|-----|---------|--------|---|----|--|
| 171 | isotig00649_gene_isogroup00440_le<br>ngth_794_numContigs_1_0 | 440 | 17 | ubiquitin c   | 265 | 8E-75   | 99.80% | P:cell cycle; P:signal transduction;<br>F:structural molecule activity;<br>P:biological_process; P:response to<br>stress; P:DNA metabolic process;<br>P:reproduction; P:viral reproduction;<br>P:translation; F:binding;<br>C:nucleoplasm; P:protein metabolic<br>process; P:catabolic process;<br>P:regulation of biological process;<br>P:cell death; F:protein binding;<br>P:cellular component organization;<br>C:plasma membrane; P:protein<br>transport; ; C:endosome;<br>C:cytoplasmic membrane-bounded<br>vesicle; P:cellular protein<br>modification process; P:nucleobase-<br>containing compound metabolic<br>process; C:ribosome; C:cytosol;<br>P:transport | 27 | IPR000626; IPR019954; IPR019955; IPR019956;<br>G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER),<br>tmhmm (TMHMM), SSF54236 (SUPERFAMILY)                        |
| 172 | isotig00655_gene_isogroup00446_le<br>ngth_782_numContigs_1_1 | 446 | 54 | protein cpg-2   | 261 | 8.9E-13 | 47.20% | P:biological_process  | 1  | IPR002557; PTHR23301 (PANTHER), PTHR23301:SF0<br>(PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 173 | isotig00661_gene_isogroup00452_le<br>ngth_753_numContigs_1_5 | 452 | 11 | dermatopontin 2   | 251 | 2.1E-40 | 60.40% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 174 | isotig00744_gene_isogroup00535_le<br>ngth_668_numContigs_1_4 | 535 | 26 | alkaline serine exoprotease a                           | 223 | 1.3E-21 | 64.40% | F:peptidase activity  | 1  | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 175 | isotig00753_gene_isogroup00544_le<br>ngth_661_numContigs_1_4 | 544 | 8  | cytosolic non-specific<br>dipeptidase                   | 220 | 3E-105  | 79.00% | F:peptidase activity; P:protein<br>metabolic process; P:catabolic<br>process  | 3  | IPR002933; IPR011650; G3DSA:3.40.630.10 (GENE3D),<br>PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER),<br>SSF53187 (SUPERFAMILY)                                  |
| 176 | isotig00761_gene_isogroup00552_le<br>ngth_647_numContigs_1_3 | 552 | 7  | mast cell protease 6                                    | 216 | 1E-86   | 72.80% | F:peptidase activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER),<br>PTHR24268:SF68 (PANTHER)                                     |
| 177 | isotig00764_gene_isogroup00555_le<br>ngth_644_numContigs_1_1 | 555 | 7  | cyclin a  | 215 | 6.8E-27 | 61.30% | P:cell cycle  | 1  | IPR006671; IPR013763; IPR014400; PTHR10177 (PANTHER)   |
| 178 | isotig00811_gene_isogroup00602_le<br>ngth_590_numContigs_1_1 | 602 | 6  | aldehyde dehydrogenase family<br>1 member mitochondrial | 197 | 7.9E-89 | 93.70% | C:cytoplasm; F:catalytic activity;<br>P:biosynthetic process; F:transferase<br>activity; P:metabolic process;<br>P:catabolic process; F:binding   | 7  | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER),<br>PTHR11699:SF46 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 179 | isotig00832_gene_isogroup00623_le<br>ngth_563_numContigs_1_5 | 623 | 26 | serine protease precursor                               | 187 | 5.7E-18 | 60.40% | P:proteolysis; F:serine-type<br>endopeptidase activity; P:negative<br>regulation of catalytic activity;<br>F:identical protein binding  | 4  | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 180 | isotig00836_gene_isogroup00627_le<br>ngth_562_numContigs_1_3 | 627 | 23 | ubiquitin ribosomal protein<br>s27a fusion protein      | 188 | 6.1E-78 | 97.50% | C:nucleoplasm; P:signal transduction;<br>P:response to stress; P:DNA<br>metabolic process; P:translation;<br>F:binding; P:metabolic process;<br>F:structural molecule activity;<br>C:endosome; C:ribosome; C:cytosol  | 11 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956;<br>G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER),<br>SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |

|     |  |     |    |  |     |         |        |  |    |   |
|-----|--|-----|----|--|-----|---------|--------|--|----|---|
| 181 | isotig00856_gene_isogroup00647_le<br>ngth_546_numContigs_1_3 | 647 | 50 | ribosomal protein ubq l40e                                   | 182 | 8.4E-86 | 98.90% | C:cytoskeleton; C:protein complex;<br>F:structural molecule activity; C:lipid<br>particle; P:cellular protein<br>modification process; P:protein<br>metabolic process; P:catabolic<br>process; C:ribosome; C:cytosol;<br>P:translation   | 10 | IPR000626; IPR001975; IPR019954; IPR019955; IPR019956;<br>G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER),<br>SSF54236 (SUPERFAMILY)   |
| 182 | isotig00863_gene_isogroup00654_le<br>ngth_535_numContigs_1_5 | 654 | 22 | low-density lipoprotein receptor-<br>related protein 8       | 178 | 9.1E-26 | 63.40% | P:multicellular organismal<br>development; F:protein binding   | 2  | <a href="#">IPR002172</a> ; <a href="#">IPR023415</a> ; <a href="#">PR00261 (PRINTS)</a> , <a href="#">PTHR10529 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>  |
| 183 | isotig00882_gene_isogroup00673_le<br>ngth_518_numContigs_1_5 | 673 | 6  | transmembrane protease                                       | 172 | 4.1E-32 | 58.30% | P:proteolysis; F:serine-type<br>endopeptidase activity; F:catalytic<br>activity; C:integral to membrane;<br>F:peptidase activity   | 5  | IPR001254; IPR001314; IPR009003; IPR018114;<br>G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)   |
| 184 | isotig00901_gene_isogroup00692_le<br>ngth_491_numContigs_1_0 | 692 | 9  | chitinase 10 precursor                                       | 164 | 1.3E-36 | 70.50% | F:hydrolase activity; F:binding;<br>P:carbohydrate metabolic process   | 3  | <a href="#">IPR001223</a> ; <a href="#">IPR013781</a> ; <a href="#">IPR017853</a> ; <a href="#">PTHR11177 (PANTHER)</a> ,<br><a href="#">PTHR11177:SF31 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> ,<br><a href="#">tmhmm (TMHMM)</a>  |
| 185 | isotig00921_gene_isogroup00712_le<br>ngth_473_numContigs_1_3 | 712 | 11 | suppressor of tumorigenicity 14<br>protein                   | 158 | 2.8E-17 | 47.90% | -  | 0  | <a href="#">IPR002172</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR023415</a> ; <a href="#">PR00261 (PRINTS)</a> ,<br><a href="#">PTHR10529 (PANTHER)</a>   |
| 186 | isotig00965_gene_isogroup00756_le<br>ngth_430_numContigs_1_1 | 756 | 9  | short-chain dehydrogenase                                    | 143 | 4.6E-38 | 71.60% | P:oxidation-reduction process;<br>F:oxidoreductase activity;<br>P:metabolic process; F:nucleotide<br>binding   | 4  | <a href="#">IPR002198</a> ; <a href="#">IPR016040</a> ; <a href="#">PTHR24322 (PANTHER)</a> ,<br><a href="#">PTHR24322:SF57 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> ,<br><a href="#">SSF51735 (SUPERFAMILY)</a>                     |
| 187 | isotig00971_gene_isogroup00762_le<br>ngth_408_numContigs_1_2 | 762 | 6  | serine protease hepsin                                       | 136 | 2.3E-11 | 61.50% | P:anatomical structure<br>morphogenesis; P:regulation of<br>biological process; F:peptidase<br>activity; P:multicellular organismal<br>development; P:cellular component<br>organization; P:primary metabolic<br>process; C:intracellular;<br>P:biological_process; P:metabolic<br>process; C:cell | 10 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> ,<br><a href="#">PTHR24265 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> ,<br><a href="#">tmhmm (TMHMM)</a> |
| 188 | isotig00991_gene_isogroup00782_le<br>ngth_328_numContigs_1_1 | 782 | 20 | low-density lipoprotein receptor-<br>related protein 2       | 109 | 9E-19   | 65.90% | C:cell   | 1  | <a href="#">IPR002172</a> ; <a href="#">IPR023415</a> ; <a href="#">PR00261 (PRINTS)</a> , <a href="#">PTHR10529 (PANTHER)</a>  |
| 189 | isotig00996_gene_isogroup00787_le<br>ngth_306_numContigs_1_1 | 787 | 15 | hemocyanin subunit type 1<br>precursor                       | 102 | 1.3E-55 | 67.80% | -  | 0  | <a href="#">IPR005204</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 190 | isotig01022_gene_isogroup00813_le<br>ngth_204_numContigs_1_0 | 813 | 8  | serine protease  | 68  | 2.6E-07 | 52.50% | F:catalytic activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D),<br>PTHR24272 (PANTHER)   |
| 191 | isotig01025_gene_isogroup00816_le<br>ngth_186_numContigs_1_2 | 816 | 14 | low-density lipoprotein receptor-<br>related protein partial | 62  | 1.6E-08 | 65.70% | P:multicellular organismal<br>development; F:protein binding;<br>C:cell  | 3  | <a href="#">IPR002172</a> ; <a href="#">IPR023415</a> ; <a href="#">PTHR10529 (PANTHER)</a>   |

**Supplementary Table 2 | All 2400 hit sequences for secreted proteins of complete specimen's tissue (BVgT) cDNA library.** For each transcript the contig name, sequence description based on the results using BLAST nr is given including sequence length, e-value, and mean similarity. BLAST2GO results are shown including Gene ontology terms (GO's) and the InterProScan results (green background highlights positive SignalP results) to identify signalpeptides. Additionally external SignalP search was conducted to identify signal peptides (positive hits are highlighted in blue font color).

| Nr | Contig sequence name                   | Sequence description<br>(BLAST nr, E-value=> 0.0001) | Length<br>(aa pos.) | E-Value   | mean<br>Similarity | Gene ontology terms and annotation (GO's)   | Nr. of<br>GO's | Interpro scan results (BLAST2GO)  <br>- Green background = SignalP hit in BLAST2GO<br>- SignalP 4.0 results with SignalP 3.1 sensitivity settings<br>(externally identified signal peptides) |
|----|--|--|---------------------|-----------|--------------------|---|----------------|--|
| 1  | DMPC15149382_Speleonectes_tulumensis_2 | manganese superoxide dismutase                       | 91                  | 2.34E-12  | 73.70%             | P:metabolic process; F:catalytic activity   | 2              | IPR001189; IPR019831; PTHR11404:SF5 (PANTHER)  |
| 2  | DMPC15149384_Speleonectes_tulumensis_4 | dual oxidase 1                                       | 144                 | 1.99E-41  | 80.70%             | P:signal transduction; F:catalytic activity; P:response to stress; F:binding; F:calcium ion binding; F:antioxidant activity; P:multicellular organismal development; C:cell; P:biological process; P:metabolic process  | 10             | IPR002007; IPR010255; PTHR11972 (PANTHER), PTHR11972:SF6 (PANTHER), tmhmm (TMHMM)  |
| 3  | DMPC15149548_Speleonectes_tulumensis_2 | c4b-binding protein beta chain                       | 123                 | 7.99E-15  | 70.10%             | F:peptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 3              | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER), PTHR19325:SF74 (PANTHER), tmhmm (TMHMM)   |
| 4  | DMPC15149677_Speleonectes_tulumensis_1 | retinal dehydrogenase 1                              | 283                 | 7.92E-128 | 80.30%             | C:cytoplasm; F:catalytic activity; P:lipid metabolic process; P:secondary metabolic process; P:metabolic process  | 5              | IPR015590; IPR016160; IPR016161; IPR016162; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)   |
| 5  | DMPC15149734_Speleonectes_tulumensis_0 | ---NA---   | 171                 |           |                    | -   | 0              | IPR000668; IPR013128; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 6  | DMPC15149760_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor           | 154                 | 3.98E-32  | 61.30%             | -   | 0              | IPR026645  |
| 7  | DMPC15149791_Speleonectes_tulumensis_1 | annulin-like isoform 2                               | 358                 | 4.94E-42  | 66.80%             | -   | 0              | IPR008958; IPR013783; IPR023608; PTHR11590:SF16 (PANTHER), tmhmm (TMHMM)   |
| 8  | DMPC15149805_Speleonectes_tulumensis_0 | 78 kda glucose-regulated protein                     | 286                 | 3.08E-78  | 93.80%             | C:cytoskeleton; C:protein complex; P:cytoskeleton organization; P:cell cycle; C:extracellular space; P:response to stress; P:response to abiotic stimulus; F:nucleotide binding; F:hydrolase activity; C:lipid particle; C:endoplasmic reticulum; P:regulation of gene expression, epigenetic; P:behavior | 13             | IPR013126; IPR018181; G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF53067 (SUPERFAMILY)   |
| 9  | DMPC15149833_Speleonectes_tulumensis_0 | na(+) h(+) exchange regulatory cofactor nhe-rf2-like | 114                 | 5.56E-37  | 84.90%             | -   | 0              | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR14191 (PANTHER)  |
| 10 | DMPC15149905_Speleonectes_tulumensis_0 | ---NA---   | 138                 |           |                    | -   | 0              | IPR026645; tmhmm (TMHMM)   |
| 11 | DMPC15149948_Speleonectes_tulumensis_0 | cathepsin 11-like                                    | 104                 | 8.26E-13  | 59.40%             | P:proteolysis; F:peptidase activity; C:cellular_component   | 3              | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)   |
| 12 | DMPC15149951_Speleonectes_tulumensis_2 | ---NA---   | 91                  |           |                    | -   | 0              | PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 13 | DMPC15149989_Speleonectes_tulumensis_2 | chymotrypsin-like elastase family member 2a-like     | 152                 | 4.21E-21  | 62.30%             | F:hydrolase activity  | 1              | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 14 | DMPC15150167_Speleonectes_tulumensis_1 | ame: full=histone h2a                                | 127                 | 7.79E-43  | 96.00%             | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4              | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)   |

|    |  |  |     |           |        |  |   |   |
|----|--|--|-----|-----------|--------|--|---|---|
| 15 | DMPC15150175_Speleonectes_tulumensis_2 | serine protease 137 precursor                        | 89  | 3.28E-12  | 66.90% | F:hydrolase activity   | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24264 (PANTHER)</a> , <a href="#">PTHR24264:SF0 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> |
| 16 | DMPC15150291_Speleonectes_tulumensis_0 | von willebrand factor a domain-containing protein 8  | 155 | 1.50E-62  | 79.50% | -  | 0 | <a href="#">PTHR21610 (PANTHER)</a> , <a href="#">PTHR21610:SF6 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 17 | DMPC15150330_Speleonectes_tulumensis_0 | enolase 1 alpha 2                                    | 89  | 3.39E-28  | 96.80% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process | 7 | <a href="#">IPR000941</a> ; <a href="#">IPR020810</a> ; <a href="#">G3DSA:3.20.20.120 (GENE3D)</a> , <a href="#">SSF51604 (SUPERFAMILY)</a>   |
| 18 | DMPC15150337_Speleonectes_tulumensis_2 | ferritin 3-like protein                              | 155 | 2.25E-22  | 81.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 19 | DMPC15150343_Speleonectes_tulumensis_0 | ---NA---   | 100 |           |        | -  | 0 | <a href="#">IPR002350</a> ; <a href="#">G3DSA:3.30.60.30 (GENE3D)</a> , <a href="#">PTHR21418 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">SSF100895 (SUPERFAMILY)</a>   |
| 20 | DMPC15150374_Speleonectes_tulumensis_0 | gamma-interferon-inducible lysosomal thiol reductase | 163 | 1.18E-14  | 49.70% | -  | 0 | <a href="#">IPR004911</a> ; <a href="#">tmhmm (TMHMM)</a>   |
| 21 | DMPC15150477_Speleonectes_tulumensis_3 | ---NA---   | 214 |           |        | -  | 0 | no IPS match  |
| 22 | DMPC15150518_Speleonectes_tulumensis_0 | dermatopontin 3                                      | 123 | 4.62E-15  | 59.70% | -  | 0 | <a href="#">IPR026645</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 23 | DMPC15150685_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                  | 132 | 8.28E-68  | 69.50% | -  | 0 | <a href="#">IPR005203</a> ; <a href="#">IPR013788</a> ; <a href="#">IPR014756</a>   |
| 24 | DMPC15150691_Speleonectes_tulumensis_0 | diuretic hormone class 2-like                        | 176 | 1.18E-22  | 72.10% | -  | 0 | <a href="#">tmhmm (TMHMM)</a>   |
| 25 | DMPC15150736_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like      | 117 | 8.84E-12  | 61.70% | -  | 0 | <a href="#">IPR026645</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 26 | DMPC15150760_Speleonectes_tulumensis_0 | perlucin 5   | 146 | 7.46E-12  | 49.60% | F:binding  | 1 | <a href="#">IPR001304</a> ; <a href="#">IPR016186</a> ; <a href="#">IPR016187</a> ; <a href="#">PTHR22802 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 27 | DMPC15150816_Speleonectes_tulumensis_2 | thioredoxin peroxidase                               | 71  | 1.59E-18  | 77.40% | P:metabolic process; F:catalytic activity; F:antioxidant activity  | 3 | <a href="#">PTHR10681 (PANTHER)</a> , <a href="#">PTHR10681:SF46 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>  |
| 28 | DMPC15150881_Speleonectes_tulumensis_2 | kazal-type protease inhibitor                        | 140 | 5.81E-22  | 53.80% | -  | 0 | <a href="#">IPR002350</a> ; <a href="#">G3DSA:3.30.60.30 (GENE3D)</a> , <a href="#">PTHR10913 (PANTHER)</a> , <a href="#">PTHR10913:SF21 (PANTHER)</a> , <a href="#">SSF100895 (SUPERFAMILY)</a>  |
| 29 | DMPC15150990_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like      | 134 | 1.27E-20  | 66.50% | -  | 0 | <a href="#">IPR026645</a>   |
| 30 | DMPC15151023_Speleonectes_tulumensis_2 | nidogen 1  | 107 | 3.43E-08  | 70.75% | P:proteolysis; F:peptidase activity  | 2 | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a>   |
| 31 | DMPC15151084_Speleonectes_tulumensis_1 | chymotrypsinogen b-like                              | 133 | 2.44E-17  | 56.70% | -  | 0 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24250 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 32 | DMPC15151230_Speleonectes_tulumensis_0 | thioredoxin peroxidase                               | 226 | 1.60E-118 | 88.10% | -  | 0 | <a href="#">IPR000866</a> ; <a href="#">IPR012336</a> ; <a href="#">IPR019479</a> ; <a href="#">IPR024706</a> ; <a href="#">PTHR10681 (PANTHER)</a> , <a href="#">PTHR10681:SF44 (PANTHER)</a>  |
| 33 | DMPC15151331_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor                       | 144 | 2.35E-28  | 65.50% | -  | 0 | <a href="#">IPR024509</a> ; <a href="#">IPR024716</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 34 | DMPC15151344_Speleonectes_tulumensis_2 | pancreatic lipase-related protein 1                  | 148 | 6.51E-14  | 54.80% | F:calcium ion binding; F:hydrolase activity  | 2 | <a href="#">IPR000734</a> ; <a href="#">IPR002331</a> ; <a href="#">IPR013818</a> ; <a href="#">G3DSA:3.40.50.1820 (GENE3D)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 35 | DMPC15151400_Speleonectes_tulumensis_2 | plasminogen activator spa                            | 99  | 1.94E-07  | 73.00% | -  | 0 | <a href="#">IPR009003</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24252 (PANTHER)</a>   |
| 36 | DMPC15151417_Speleonectes_tulumensis_2 | oocyte protease inhibitor-1 precursor                | 113 | 7.77E-11  | 63.60% | P:proteolysis; F:peptidase activity  | 2 | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |

|    |  |   |     |           |        |  |   |  |
|----|--|---|-----|-----------|--------|--|---|--|
| 37 | DMPC15151440_Speleonectes_tulumensis_1 | trypsinogen h2_1a   | 193 | 7.45E-22  | 54.20% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNA LP)               |
| 38 | DMPC15151465_Speleonectes_tulumensis_1 | alkyl hydroperoxide reductase thiol specific antioxidant mal allergen | 123 | 6.19E-32  | 68.40% | F:catalytic activity   | 1 | IPR000866; IPR012336; PTHR10681 (PANTHER), SignalP-NN(euk) (SIGNA LP)  |
| 39 | DMPC15151474_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4                              | 120 | 9.27E-26  | 58.60% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 40 | DMPC15151526_Speleonectes_tulumensis_1 | ---NA---  | 127 |           |        | -  | 0 | IPR001747; IPR011030   |
| 41 | DMPC15151533_Speleonectes_tulumensis_0 | anti-lipop polysaccharide factor isoform 7                            | 133 | 1.92E-18  | 56.90% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNA LP)   |
| 42 | DMPC15151551_Speleonectes_tulumensis_0 | aldehyde dehydrogenase mitochondrial-like                             | 128 | 1.71E-64  | 86.20% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)   |
| 43 | DMPC15151645_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_300066                                | 121 | 6.50E-08  | 58.00% | -  | 0 | IPR001134; IPR018933; SignalP-NN(euk) (SIGNA LP)   |
| 44 | DMPC15151760_Speleonectes_tulumensis_2 | probable chitinase 1  | 412 | 2.21E-62  | 55.40% | -  | 0 | IPR001223; IPR002557; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)        |
| 45 | DMPC15151804_Speleonectes_tulumensis_0 | purple acid   | 540 | 1.78E-28  | 67.00% | F:metal ion binding; F:hydrolase activity; F:acid phosphatase activity   | 3 | IPR008963; IPR015914; PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER)   |
| 46 | DMPC15151804_Speleonectes_tulumensis_1 | iron zinc purple acid phosphatase-like                                | 540 | 6.27E-147 | 77.50% | F:hydrolase activity   | 1 | IPR004843; IPR025733; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), tmhmm (TMHMM), SSF56300 (SUPERFAMILY) |
| 47 | DMPC15151883_Speleonectes_tulumensis_1 | trypsin-like serine proteinase 1                                      | 123 | 4.35E-25  | 65.30% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNA LP)            |
| 48 | DMPC15151902_Speleonectes_tulumensis_0 | trypsin-like serine proteinase 1                                      | 111 | 2.17E-13  | 52.60% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNA LP)                                     |
| 49 | DMPC15151907_Speleonectes_tulumensis_2 | clotting factor b-like  | 140 | 1.58E-30  | 63.30% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)                            |
| 50 | DMPC15152039_Speleonectes_tulumensis_0 | ferritin-1 heavy chain  | 107 | 2.15E-22  | 88.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                    | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 51 | DMPC15152053_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate dehydrogenase                              | 158 | 4.37E-28  | 93.60% | F:catalytic activity; P:metabolic process  | 2 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), tmhmm (TMHMM), SSF55347 (SUPERFAMILY)  |
| 52 | DMPC15152055_Speleonectes_tulumensis_1 | aldo-keto partial   | 119 | 7.35E-19  | 71.80% | F:catalytic activity; P:multicellular organismal development   | 2 | IPR001395; IPR018170; IPR023210; PTHR11732:SF34 (PANTHER), SignalP-NN(euk) (SIGNA LP)  |
| 53 | DMPC15152138_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase                              | 153 | 8.59E-16  | 88.40% | F:catalytic activity; P:metabolic process; F:nucleotide binding  | 3 | IPR016040; IPR020828; IPR020831; SSF51735 (SUPERFAMILY)  |
| 54 | DMPC15152188_Speleonectes_tulumensis_1 | calreticulin  | 125 | 4.28E-29  | 80.00% | -  | 0 | IPR001580; IPR008985; IPR013320; PTHR11073:SF2 (PANTHER), SignalP-NN(euk) (SIGNA LP), tmhmm (TMHMM)                                  |
| 55 | DMPC15152342_Speleonectes_tulumensis_2 | aldehyde mitochondrial-like isoform 1                                 | 246 | 1.75E-126 | 84.50% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016160; IPR016161; IPR016162; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)                                 |
| 56 | DMPC15152349_Speleonectes_tulumensis_2 | dehydrogenase reductase sdr family member 11-like                     | 206 | 1.04E-13  | 81.90% | F:binding; F:catalytic activity; P:metabolic process; F:nucleotide binding                                       | 4 | IPR002198; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 57 | DMPC15152357_Speleonectes_tulumensis_1 | epididymal secretory protein e1 isoform 1                             | 142 | 1.23E-21  | 57.80% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNA LP), tmhmm (TMHMM)   |
| 58 | DMPC15152416_Speleonectes_tulumensis_0 | vitellogenin 2  | 147 | 3.76E-12  | 50.40% | P:lipid transport; F:lipid transporter activity  | 2 | IPR001747; IPR015816; IPR015819; PTHR23345 (PANTHER), SignalP-NN(euk) (SIGNA LP), tmhmm (TMHMM)                                      |



|    |  |  |     |          |        |   |   |   |
|----|--|--|-----|----------|--------|---|---|---|
| 59 | DMPC15152501_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor                            | 138 | 2.97E-21 | 51.80% | P:peptidase inhibitor activity; P:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 60 | DMPC15152503_Speleonectes_tulumensis_0 | stress-induced-phosphoprotein 1  | 128 | 3.95E-45 | 79.60% | -   | 0 | IPR001440; IPR011990; IPR013026; IPR019734; PTHR22904 (PANTHER), PTHR22904:SF14 (PANTHER), PF13414 (PFAM), SSF48452 (SUPERFAMILY)       |
| 61 | DMPC15152511_Speleonectes_tulumensis_1 | soma ferritin  | 120 | 6.65E-36 | 87.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 62 | DMPC15152776_Speleonectes_tulumensis_0 | glucose dehydrogenase  | 139 | 3.81E-46 | 72.20% | P:metabolic process; F:catalytic activity   | 2 | IPR000172; G3DSA:3.30.560.10 (GENE3D), G3DSA:3.50.50.60 (GENE3D), PTHR11552 (PANTHER), PTHR11552:SF10 (PANTHER), SSF51905 (SUPERFAMILY) |
| 63 | DMPC15152874_Speleonectes_tulumensis_0 | hemocyanin subunit 2 precursor   | 127 | 1.46E-18 | 84.67% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 64 | DMPC15152892_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor                                 | 136 | 1.83E-13 | 56.90% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 65 | DMPC15152895_Speleonectes_tulumensis_1 | cathepsin 1-like   | 147 | 5.18E-81 | 85.80% | -   | 0 | IPR000169; IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                           |
| 66 | DMPC15152898_Speleonectes_tulumensis_0 | hypothetical protein CAPTEDRAFT_171631                                     | 148 | 9.84E-09 | 62.00% | -   | 0 | PTHR12630 (PANTHER)   |
| 67 | DMPC15152963_Speleonectes_tulumensis_1 | 32 kda beta-galactoside-binding lectin (galactin-1)                        | 131 | 1.34E-18 | 61.50% | F:carbohydrate binding  | 1 | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)  |
| 68 | DMPC15152996_Speleonectes_tulumensis_0 | ---NA---   | 153 |          |        | -   | 0 | IPR008197; PTHR19441 (PANTHER)  |
| 69 | DMPC15153009_Speleonectes_tulumensis_2 | dermatopontin 2  | 127 | 2.29E-14 | 59.60% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 70 | DMPC15153037_Speleonectes_tulumensis_0 | ---NA---   | 150 |          |        | -   | 0 | IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 71 | DMPC15153070_Speleonectes_tulumensis_2 | vitellogenin 2   | 496 | 6.97E-53 | 48.70% | -   | 0 | IPR001747; IPR015816; IPR015819; PTHR23345 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 72 | DMPC15153082_Speleonectes_tulumensis_0 | hyaluronidase-3 isoform 1  | 208 | 1.62E-07 | 66.00% | -   | 0 | IPR013785; IPR017853; IPR018155   |
| 73 | DMPC15153089_Speleonectes_tulumensis_0 | plasminogen activator spa  | 135 | 1.59E-18 | 65.20% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER)  |
| 74 | DMPC15153117_Speleonectes_tulumensis_2 | arylsulfatase b  | 250 | 1.12E-07 | 62.83% | P:metabolic process; F:catalytic activity; F:sulfuric ester hydrolase activity  | 3 | G3DSA:3.30.1120.10 (GENE3D), tmhmm (TMHMM)  |
| 75 | DMPC15153155_Speleonectes_tulumensis_2 | si:dkey- protein   | 105 | 4.93E-09 | 61.44% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 76 | DMPC15153204_Speleonectes_tulumensis_1 | suppressor of tumorigenicity protein 14                                    | 350 | 1.12E-45 | 51.80% | -   | 0 | IPR001254; IPR001314; IPR002172; IPR009003; IPR018114; IPR023415; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)                        |
| 77 | DMPC15153227_Speleonectes_tulumensis_0 | ---NA---   | 149 |          |        | -   | 0 | IPR008197; PTHR19441 (PANTHER)  |
| 78 | DMPC15153251_Speleonectes_tulumensis_2 | serine protease 56-like  | 204 | 2.02E-10 | 50.80% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24261 (PANTHER), PTHR24261:SF9 (PANTHER), SignalP-NN(euk) (SIGNALP)                |
| 79 | DMPC15153289_Speleonectes_tulumensis_2 | y-box factor-like protein  | 145 | 5.24E-29 | 67.10% | P:regulation of transcription, DNA-dependent; F:nucleic acid binding; F:DNA binding   | 3 | IPR002059; IPR011129; IPR012340; IPR019844; PTHR11544 (PANTHER), PTHR11544:SF14 (PANTHER)   |
| 80 | DMPC15153444_Speleonectes_tulumensis_2 | chain tachylectin 5a from tachypleus tridentatus (japanese horseshoe crab) | 292 | 2.35E-60 | 63.30% | -   | 0 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)   |

|    |  |   |     |           |        |  |   |  |
|----|--|---|-----|-----------|--------|--|---|--|
| 81 | DMPC15153462_Speleonectes_tulumensis_0 | mgc52890 protein  | 148 | 2.95E-24  | 60.00% | C:extracellular space; P:multicellular organismal development; F:hydrolase activity; P:response to endogenous stimulus; F:protein binding                                      | 5 | IPR000734; IPR002331; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                                 |
| 82 | DMPC15153496_Speleonectes_tulumensis_1 | glutathione peroxidase 7  | 100 | 1.18E-16  | 78.00% | C:extracellular region; F:catalytic activity; F:antioxidant activity; P:response to stress; P:metabolic process  | 5 | IPR000889; IPR012336; SignalP-NN(euk) (SIGNALP)  |
| 83 | DMPC15153572_Speleonectes_tulumensis_2 | 3-hydroxybutyrate dehydrogenase type 2-like   | 251 | 5.91E-122 | 80.40% | F:nucleotide binding; C:mitochondrion; F:catalytic activity; P:biological process; P:catabolic process; P:lipid metabolic process; P:biosynthetic process; P:metabolic process | 8 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24321 (PANTHER), PTHR24321:SF0 (PANTHER), PF13561 (PFAM), SSF51735 (SUPERFAMILY)                               |
| 84 | DMPC15153590_Speleonectes_tulumensis_2 | nk-tumor recognition protein  | 225 | 7.06E-69  | 89.20% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF130 (PANTHER)   |
| 85 | DMPC15153641_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase  | 149 | 3.32E-57  | 85.80% | F:nucleotide binding; P:carbohydrate metabolic process; F:catalytic activity; P:metabolic process  | 4 | IPR016040; IPR020828; IPR020831; SSF51735 (SUPERFAMILY)  |
| 86 | DMPC15153712_Speleonectes_tulumensis_0 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf flags: precursor | 101 | 7.60E-07  | 65.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 87 | DMPC15153713_Speleonectes_tulumensis_1 | aael012452- partial   | 186 | 1.38E-11  | 42.50% | -  | 0 | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER)  |
| 88 | DMPC15153745_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like   | 142 | 2.66E-10  | 59.20% | -  | 0 | IPR026645; tmhmm (TMHMM)   |
| 89 | DMPC15153843_Speleonectes_tulumensis_2 | ferritin gf1  | 106 | 3.24E-24  | 88.30% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 90 | DMPC15153890_Speleonectes_tulumensis_1 | ---NA---  | 122 |           |        | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), PTHR24275:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                        |
| 91 | DMPC15153910_Speleonectes_tulumensis_2 | epidermal retinol dehydrogenase 2   | 177 | 1.78E-32  | 70.10% | F:catalytic activity   | 1 | IPR002198; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF51735 (SUPERFAMILY)                           |
| 92 | DMPC15153976_Speleonectes_tulumensis_2 | trypsin   | 113 | 3.96E-45  | 77.30% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)  |
| 93 | DMPC15154034_Speleonectes_tulumensis_2 | dermatopontin 2   | 104 | 1.41E-07  | 63.17% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 94 | DMPC15154185_Speleonectes_tulumensis_2 | PREDICTED: nidogen-1  | 146 | 9.15E-08  | 59.00% | F:peptidase inhibitor activity; P:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                            | 4 | IPR000716; IPR022339   |
| 95 | DMPC15154392_Speleonectes_tulumensis_2 | mast cell protease 6  | 272 | 1.13E-92  | 72.60% | F:peptidase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 96 | DMPC15154421_Speleonectes_tulumensis_2 | PREDICTED: chymotrypsin-C-like  | 106 | 7.52E-08  | 53.00% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), PTHR24275:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                        |

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| 97  | DMPC15154435_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a             | 148 | 1.98E-58 | 97.10% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 98  | DMPC15154482_Speleonectes_tulumensis_2 | ---NA---   | 143 |          |        | -  | 0  | no IPS match   |
| 99  | DMPC15154520_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_189509           | 115 | 1.92E-44 | 79.00% | F:calcium ion binding  | 1  | IPR002048; IPR011992; IPR018247; IPR027241; PTHR10827 (PANTHER), SSF47473 (SUPERFAMILY)  |
| 100 | DMPC15154565_Speleonectes_tulumensis_1 | lipase 3   | 72  | 5.24E-25 | 81.80% | P:catabolic process; P:lipid metabolic process; F:hydrolase activity   | 3  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), SSF53474 (SUPERFAMILY)  |
| 101 | DMPC15154637_Speleonectes_tulumensis_1 | epididymal secretory protein e1-like             | 140 | 3.64E-11 | 63.50% | P:transport; F:binding; C:intracellular  | 3  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 102 | DMPC15154645_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_194525           | 201 | 1.45E-27 | 61.50% | F:catalytic activity   | 1  | IPR002557; IPR013781; IPR017853; PTHR11177 (PANTHER)   |
| 103 | DMPC15154703_Speleonectes_tulumensis_2 | mdl2   | 151 | 9.92E-11 | 52.30% | -  | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 104 | DMPC15154704_Speleonectes_tulumensis_1 | ves g 5 allergen                                 | 376 | 4.95E-39 | 52.50% | C:extracellular region   | 1  | IPR001283; IPR002413; IPR014044; IPR018244; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 105 | DMPC15154765_Speleonectes_tulumensis_2 | vitelline membrane outer layer protein 1 homolog | 136 | 4.96E-13 | 53.40% | -  | 0  | IPR005515; PTHR18841:SF0 (PANTHER)   |
| 106 | DMPC15154809_Speleonectes_tulumensis_0 | heavy polypeptide 1                              | 110 | 1.88E-21 | 87.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 107 | DMPC15154820_Speleonectes_tulumensis_2 | zinc finger protein glis2-like                   | 230 | 2.46E-37 | 65.20% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR19818 (PANTHER), PTHR19818:SF11 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                                   |
| 108 | DMPC15154843_Speleonectes_tulumensis_2 | hemolectin cg7002-pa                             | 545 | 6.42E-51 | 53.40% | P:cell adhesion; F:chitin binding; P:chitin metabolic process; C:extracellular region  | 4  | IPR006207; IPR006208; PTHR11339 (PANTHER), PTHR11339:SF25 (PANTHER), SSF57603 (SUPERFAMILY)  |
| 109 | DMPC15154971_Speleonectes_tulumensis_1 | neutral protease precursor                       | 147 | 1.48E-12 | 67.40% | F:peptidase activity   | 1  | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 110 | DMPC15155046_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor              | 140 | 2.59E-49 | 67.90% | -  | 0  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 111 | DMPC15155140_Speleonectes_tulumensis_0 | serine protease precursor                        | 149 | 3.23E-17 | 59.50% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding  | 4  | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 112 | DMPC15155284_Speleonectes_tulumensis_1 | histone 2b                                       | 374 | 3.16E-60 | 98.20% | C:chromosome; F:DNA binding; C:nucleoplasm; C:protein complex; P:organelle organization; C:lipid particle  | 6  | IPR000558; IPR007125; IPR009072  |
| 113 | DMPC15155302_Speleonectes_tulumensis_1 | upf0364 protein c6orf211 homolog                 | 150 | 3.74E-42 | 73.00% | -  | 0  | IPR002791; PTHR12260 (PANTHER)   |
| 114 | DMPC15155309_Speleonectes_tulumensis_1 | female reproductive tract protease gleanr_2574   | 156 | 4.10E-12 | 60.50% | F:hydrolase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)   |

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|-----|--|--|-----|-----------|--------|---|----|---|
| 115 | DMPC15155311_Speleonectes_tulumensis_0 | hyaluronidase-1 isoform 4  | 102 | 1.75E-14  | 64.30% | P:response to biotic stimulus; P:regulation of biological process; P:cell growth; P:cell cycle; P:biosynthetic process; P:carbohydrate metabolic process; P:biological_process; P:anatomical structure morphogenesis; P:multicellular organismal development; C:extracellular space; C:lysosome; P:response to stress; P:catabolic process; P:response to abiotic stimulus; F:hydrolase activity; F:receptor activity; C:organelle; C:cytoplasm; F:transferase activity; P:response to external stimulus; P:cell proliferation; F:protein binding | 22 | IPR013785; IPR017853; IPR018155   |
| 116 | DMPC15155327_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor  | 130 | 1.14E-14  | 50.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 117 | DMPC15155428_Speleonectes_tulumensis_1 | heat shock cognate 70 kda protein  | 304 | 6.82E-176 | 97.70% | F:nucleotide binding; P:response to stress  | 2  | IPR013126; IPR018181; G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D), G3DSA:3.90.640.10 (GENE3D), PTHR19375 (PANTHER), SSF100920 (SUPERFAMILY), SSF53067 (SUPERFAMILY)   |
| 118 | DMPC15155487_Speleonectes_tulumensis_2 | pancreatic lipase-related protein 1  | 217 | 5.30E-30  | 65.00% | F:catalytic activity  | 1  | IPR000734; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 119 | DMPC15155611_Speleonectes_tulumensis_2 | oocyte protease inhibitor-1 precursor  | 123 | 1.08E-10  | 65.60% | P:proteolysis; F:peptidase activity   | 2  | <a href="#">IPR000716</a> ; <a href="#">IPR022339</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 120 | DMPC15155906_Speleonectes_tulumensis_2 | protein  | 145 | 5.92E-17  | 49.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a>   |
| 121 | DMPC15155912_Speleonectes_tulumensis_2 | histone h2a  | 161 | 4.74E-57  | 85.30% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4  | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 122 | DMPC15155918_Speleonectes_tulumensis_2 | gamma-glutamyl hydrolase-like  | 144 | 2.70E-08  | 63.40% | F:hydrolase activity; P:glutamine metabolic process; F:catalytic activity; F:omega peptidase activity   | 4  | IPR015527; PTHR11315:SF0 (PANTHER)  |
| 123 | DMPC15155953_Speleonectes_tulumensis_1 | cd74 major histocompatibility class ii invariant chain a   | 123 | 4.84E-08  | 67.67% | P:multicellular organismal development  | 1  | <a href="#">IPR000716</a> ; <a href="#">IPR022339</a> ; <a href="#">PTHR14093:SF6 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 124 | DMPC15156060_Speleonectes_tulumensis_0 | thioredoxin peroxidase   | 114 | 4.47E-68  | 90.70% | -   | 0  | IPR000866; IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)  |
| 125 | DMPC15156104_Speleonectes_tulumensis_0 | a chain crystal spectroscopic and catalytic properties of cobalt copper nickel and mercury derivatives of the zinc endopeptidase a correlation of structure and proteolytic activity | 85  | 1.24E-12  | 64.10% | F:peptidase activity; P:reproduction; P:protein metabolic process; C:cytoplasm  | 4  | IPR001506; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)   |
| 126 | DMPC15156112_Speleonectes_tulumensis_1 | dlg-interacting metalloprotease  | 198 | 1.35E-24  | 49.60% | P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:peptidase activity; F:metalloendopeptidase activity   | 5  | IPR006586; IPR024079; PTHR13723 (PANTHER), PF13574 (PFAM), SSF55486 (SUPERFAMILY)   |
| 127 | DMPC15156162_Speleonectes_tulumensis_0 | plasminogen activator spa  | 150 | 4.22E-20  | 65.30% | F:peptidase activity  | 1  | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24260 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |

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|-----|--|--|-----|----------|--------|---|----|--|
| 128 | DMPC15156454_Speleonectes_tulumensis_2 | serine protease hepsin                     | 133 | 9.87E-12 | 57.90% | P:anatomical structure morphogenesis; P:regulation of biological process; F:peptidase activity; P:embryo development; P:cellular component organization; P:response to external stimulus; P:response to abiotic stimulus; C:plasma membrane; C:cell; F:ion channel activity; C:intracellular; P:metabolic process | 12 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP)                               |
| 129 | DMPC15156478_Speleonectes_tulumensis_2 | calponin transgelin                        | 179 | 9.79E-76 | 88.40% | F:actin binding; P:cytoskeleton organization  | 2  | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER), PTHR18959:SF3 (PANTHER)  |
| 130 | DMPC15156485_Speleonectes_tulumensis_0 | ---NA---                                   | 337 |          | -      |   | 0  | IPR014853  |
| 131 | DMPC15156513_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor | 110 | 3.36E-22 | 61.20% | -   | 0  | IPR026645  |
| 132 | DMPC15156534_Speleonectes_tulumensis_2 | kazal-type protease inhibitor              | 107 | 3.12E-13 | 55.60% | -   | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SSF100895 (SUPERFAMILY)                             |
| 133 | DMPC15156566_Speleonectes_tulumensis_0 | phosphoglucose isomerase                   | 69  | 8.78E-21 | 78.00% | P:carbohydrate metabolic process; F:catalytic activity  | 2  | IPR001672; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER), SSF53697 (SUPERFAMILY)   |
| 134 | DMPC15156577_Speleonectes_tulumensis_0 | chitinase chit1 precursor                  | 213 | 4.03E-10 | 59.30% | F:chitin binding; P:chitin metabolic process; C:extracellular region  | 3  | IPR002557; PTHR23301 (PANTHER)   |
| 135 | DMPC15156635_Speleonectes_tulumensis_0 | phospholipase a2                           | 132 | 3.76E-15 | 68.10% | F:calcium ion binding; F:hydrolase activity; P:lipid metabolic process; P:catabolic process   | 4  | IPR001211; IPR016090   |
| 136 | DMPC15156697_Speleonectes_tulumensis_3 | syntaxin 1a                                | 138 | 3.59E-14 | 95.20% | C:cell; F:protein binding; C:intracellular; P:transport; P:protein transport  | 5  | IPR000727; IPR010989; G3DSA:1.20.5.110 (GENE3D), PTHR19957 (PANTHER), PTHR19957:SF33 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 137 | DMPC15156708_Speleonectes_tulumensis_1 | membrane metallo-endopeptidase-like 1-like | 306 | 2.32E-66 | 68.50% | P:proteolysis; F:metallopeptidase activity; F:metalloendopeptidase activity   | 3  | IPR000718; IPR018497; IPR024079; PTHR11733:SF26 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 138 | DMPC15156777_Speleonectes_tulumensis_1 | soma ferritin                              | 123 | 4.74E-27 | 88.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 139 | DMPC15156807_Speleonectes_tulumensis_2 | hemocyanin subunit type 2 precursor        | 80  | 4.00E-31 | 72.70% | -   | 0  | IPR005203; IPR014756   |
| 140 | DMPC15156826_Speleonectes_tulumensis_0 | si:dkey- protein                           | 106 | 3.27E-08 | 63.29% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 141 | DMPC15156876_Speleonectes_tulumensis_0 | peptidase m4 thermolysin                   | 120 | 2.55E-07 | 59.83% | P:proteolysis; F:hydrolase activity; F:metalloendopeptidase activity  | 3  | SignalP-NN(euk) (SIGNALP)  |
| 142 | DMPC15156906_Speleonectes_tulumensis_2 | isoform e                                  | 120 | 2.53E-11 | 67.30% | F:calcium ion binding; C:integral to membrane; C:membrane   | 3  | IPR002172; IPR023415; PTHR10529 (PANTHER), tmhmm (TMHMM)   |
| 143 | DMPC15156935_Speleonectes_tulumensis_1 | hatching enzyme                            | 185 | 3.38E-30 | 56.00% | F:hydrolase activity  | 1  | IPR001506; IPR006026; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SSF55486 (SUPERFAMILY)                                   |
| 144 | DMPC15156938_Speleonectes_tulumensis_1 | ---NA---                                   | 175 |          | -      |   | 0  | no IPS match   |
| 145 | DMPC15156956_Speleonectes_tulumensis_1 | thioredoxin peroxidase 2                   | 188 | 2.67E-20 | 89.00% | P:metabolic process; F:catalytic activity; F:antioxidant activity   | 3  | IPR012336; IPR019479; PTHR10681 (PANTHER)  |
| 146 | DMPC15156958_Speleonectes_tulumensis_1 | succinate semialdehyde                     | 211 | 7.94E-93 | 77.80% | P:metabolic process; F:catalytic activity   | 2  | IPR015590; IPR016160; IPR016161; IPR016162; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF49 (PANTHER)                                     |
| 147 | DMPC15157009_Speleonectes_tulumensis_1 | thioredoxin-like protein                   | 121 | 1.64E-24 | 82.00% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process  | 5  | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)   |
| 148 | DMPC15157030_Speleonectes_tulumensis_1 | peroxidasin homolog                        | 287 | 1.08E-14 | 63.80% | P:oxidation-reduction process; F:heme binding; F:oxidoreductase activity; P:response to oxidative stress; F:peroxidase activity   | 5  | IPR002007; IPR010255; PTHR11475 (PANTHER), tmhmm (TMHMM)   |

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|-----|--|---|-----|----------|--------|---|---|---|
| 149 | DMPC15157083_Speleonectes_tulumensis_1 | interferon-related developmental regulator 1-like                         | 330 | 4.84E-27 | 49.50% | -   | 0 | IPR009832; PTHR20997 (PANTHER), PTHR20997:SF0 (PANTHER), tmhmm (TMHMM)  |
| 150 | DMPC15157124_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor                                | 107 | 3.52E-22 | 56.30% | -   | 0 | IPR026645   |
| 151 | DMPC15157129_Speleonectes_tulumensis_1 | dermatopontin 2   | 135 | 4.11E-09 | 63.75% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 152 | DMPC15157190_Speleonectes_tulumensis_1 | crisp3: cysteine-rich secretory   | 129 | 6.38E-11 | 51.40% | C:extracellular region  | 1 | IPR001283; IPR014044; IPR018244   |
| 153 | DMPC15157220_Speleonectes_tulumensis_1 | phospholipase a2-like   | 154 | 5.78E-17 | 61.30% | F:phosphonase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; F:binding; P:metabolic process   | 5 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 154 | DMPC15157247_Speleonectes_tulumensis_2 | manganese superoxide dismutase  | 96  | 7.05E-17 | 83.90% | F:binding; P:metabolic process; F:catalytic activity  | 3 | IPR001189; IPR019831; PTHR11404:SF5 (PANTHER)   |
| 155 | DMPC15157302_Speleonectes_tulumensis_1 | chain crystallographic structure of thioredoxin from litopenaeus vannamei | 104 | 3.37E-21 | 77.20% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process              | 5 | IPR005746; IPR012336; IPR013766; IPR017937; PTHR10438:SF17 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 156 | DMPC15157334_Speleonectes_tulumensis_2 | peptidoglycan recognition protein 2 short class                           | 105 | 1.57E-17 | 64.80% | F:zinc ion binding; P:peptidoglycan catabolic process; F:N-acetylmuramoyl-L-alanine amidase activity  | 3 | IPR002502; IPR006619; IPR015510; SignalP-NN(euk) (SIGNALP)  |
| 157 | DMPC15157398_Speleonectes_tulumensis_1 | 26kda protease  | 133 | 2.40E-16 | 62.90% | F:hydrolase activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 158 | DMPC15157497_Speleonectes_tulumensis_2 | carbohydrate sulfotransferase 11-like                                     | 232 | 8.39E-28 | 63.60% | -   | 0 | IPR005331; IPR018011; PTHR12137:SF1 (PANTHER)   |
| 159 | DMPC15157535_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200                                    | 144 | 3.06E-09 | 51.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 160 | DMPC15157545_Speleonectes_tulumensis_1 | phosphoglycerate kinase   | 122 | 1.28E-38 | 86.70% | P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; P:metabolic process; F:kinase activity | 5 | IPR001576; IPR015824; IPR015911   |
| 161 | DMPC15157553_Speleonectes_tulumensis_0 | gonadotropin inducible transcription                                      | 161 | 6.04E-32 | 69.90% | F:binding   | 1 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 162 | DMPC15157662_Speleonectes_tulumensis_2 | soma ferritin   | 110 | 1.46E-32 | 89.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 163 | DMPC15157667_Speleonectes_tulumensis_0 | plasminogen activator spa   | 394 | 1.05E-60 | 64.40% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER) IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY) |
| 164 | DMPC15157696_Speleonectes_tulumensis_2 | cathepsin l   | 150 | 8.61E-68 | 78.80% | -   | 0 | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER) IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SSF100895 (SUPERFAMILY)          |
| 165 | DMPC15157704_Speleonectes_tulumensis_0 | lysozyme precursor  | 117 | 7.95E-08 | 61.00% | -   | 0 | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER) IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SSF100895 (SUPERFAMILY)          |
| 166 | DMPC15157711_Speleonectes_tulumensis_1 | serine protease inhibitor kazal-type 6-like                               | 119 | 5.41E-08 | 66.50% | -   | 0 | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER) IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SSF100895 (SUPERFAMILY)          |
| 167 | DMPC15157773_Speleonectes_tulumensis_1 | soma ferritin   | 126 | 4.24E-39 | 85.30% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 168 | DMPC15157797_Speleonectes_tulumensis_2 | female neotenic-specific protein 3  | 152 | 8.88E-11 | 57.75% | -   | 0 | no IPS match  |
| 169 | DMPC15157812_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor                                | 107 | 5.03E-20 | 63.10% | -   | 0 | IPR026645   |
| 170 | DMPC15157831_Speleonectes_tulumensis_0 | cg3556 cg3556-pa  | 224 | 1.51E-21 | 57.90% | P:cobalamin transport; F:cobalamin binding  | 2 | IPR002157   |

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|-----|--|--|-----|----------|--------|--|----|---|
| 171 | DMPC15157857_Speleonectes_tulumensis_2 | aldehyde dehydrogenase family 1 member mitochondrial       | 137 | 4.21E-68 | 94.70% | C:cytoplasm; F:catalytic activity; P:biosynthetic process; F:transferase activity; P:metabolic process; P:catabolic process; F:binding   | 7  | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 172 | DMPC15157876_Speleonectes_tulumensis_1 | soma ferritin  | 114 | 4.96E-33 | 88.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 173 | DMPC15157895_Speleonectes_tulumensis_2 | cyclophilin a  | 498 | 7.99E-58 | 90.10% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), tmhmm (TMHMM)  |
| 174 | DMPC15157900_Speleonectes_tulumensis_2 | protein disulfide isoform a                                | 150 | 2.68E-53 | 83.80% | C:extracellular space; P:protein metabolic process; C:cell; C:endoplasmic reticulum; C:cytoplasm; C:lipid particle; F:electron carrier activity; P:cellular homeostasis; P:regulation of biological process; P:metabolic process; C:nuclear envelope; C:organelle; C:intracellular; F:catalytic activity | 14 | IPR005746; IPR005788; IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 175 | DMPC15158036_Speleonectes_tulumensis_2 | ---NA---   | 100 |          |        | -  | 0  | PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 176 | DMPC15158091_Speleonectes_tulumensis_1 | lipase 3-like  | 171 | 5.08E-22 | 66.60% | F:hydrolase activity; P:lipid metabolic process  | 2  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), tmhmm (TMHMM)  |
| 177 | DMPC15158127_Speleonectes_tulumensis_1 | ferritin h subunit   | 118 | 6.56E-20 | 91.50% | P:cellular homeostasis; F:binding; P:regulation of biological process; P:cell proliferation; F:catalytic activity; P:ion transport; C:mitochondrion; P:metabolic process   | 8  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 178 | DMPC15158128_Speleonectes_tulumensis_2 | syntaxin-1a-like isoform 2                                 | 306 | 3.67E-14 | 76.60% | -  | 0  | no IPS match  |
| 179 | DMPC15158185_Speleonectes_tulumensis_2 | carboxypeptidase a1-like                                   | 160 | 3.32E-29 | 71.20% | -  | 0  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)  |
| 180 | DMPC15158213_Speleonectes_tulumensis_1 | ferritin-1 heavy chain                                     | 106 | 1.74E-20 | 90.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 181 | DMPC15158229_Speleonectes_tulumensis_1 | trypsin  | 126 | 3.94E-13 | 60.30% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 182 | DMPC15158249_Speleonectes_tulumensis_2 | plasma alpha-l-fucosidase                                  | 243 | 4.76E-74 | 68.80% | P:metabolic process; F:hydrolase activity  | 2  | IPR000933; IPR013781; IPR016286; IPR017853; PTHR10030:SF3 (PANTHER), tmhmm (TMHMM)  |
| 183 | DMPC15158291_Speleonectes_tulumensis_0 | ferritin subunit   | 146 | 1.53E-39 | 76.60% | F:binding  | 1  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 184 | DMPC15158475_Speleonectes_tulumensis_0 | sh3 domain-containing ring finger protein 3-like isoform 2 | 270 | 1.01E-18 | 67.10% | F:binding  | 1  | IPR001452; G3DSA:2.30.30.40 (GENE3D), PTHR10661 (PANTHER), PTHR10661:SF7 (PANTHER), tmhmm (TMHMM)                               |
| 185 | DMPC15158487_Speleonectes_tulumensis_0 | anti-lipop polysaccharide factor isoform 7                 | 145 | 4.24E-29 | 68.20% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 186 | DMPC15158533_Speleonectes_tulumensis_0 | cysteine string  | 137 | 9.04E-63 | 94.80% | P:protein metabolic process; F:protein binding   | 2  | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF7 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |
| 187 | DMPC15158632_Speleonectes_tulumensis_2 | dermatopontin 3  | 98  | 3.72E-08 | 69.20% | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 188 | DMPC15158662_Speleonectes_tulumensis_1 | glucose-6-phosphate isomerase                              | 78  | 5.19E-22 | 72.90% | P:carbohydrate metabolic process; F:catalytic activity   | 2  | IPR001672; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER), SSF53697 (SUPERFAMILY)  |
| 189 | DMPC15158690_Speleonectes_tulumensis_1 | thioredoxin 1  | 144 | 1.68E-42 | 85.20% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process   | 5  | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 190 | DMPC15158700_Speleonectes_tulumensis_1 | lachesin   | 90  | 1.28E-20 | 71.90% | -  | 0  | IPR003598; IPR007110; IPR013098; IPR013783; PTHR19831 (PANTHER), PTHR19831:SF16 (PANTHER), SSF48726 (SUPERFAMILY)               |

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|-----|--|--|-----|----------|--------|--|----|---|
| 191 | DMPC15158773_Speleonectes tulumensis_2 | hypothetical protein DAPPUDRAFT_308544     | 132 | 5.33E-07 | 66.00% | -  | 0  | IPR004911   |
| 192 | DMPC15158883_Speleonectes tulumensis_2 | tpa_inf: hypothetical secreted protein 469 | 190 | 6.69E-09 | 47.75% | -  | 0  | IPR020234   |
| 193 | DMPC15158914_Speleonectes tulumensis_1 | galectin partial                           | 196 | 5.98E-25 | 59.90% | F:carbohydrate binding   | 1  | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)  |
| 194 | DMPC15159017_Speleonectes tulumensis_2 | phospholipase a2-like                      | 132 | 9.38E-08 | 59.67% | F:phosphonopase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region  | 5  | IPR001211; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 195 | DMPC15159052_Speleonectes tulumensis_0 | galactose-specific c-type lectin           | 230 | 8.33E-13 | 48.30% | F:carbohydrate binding   | 1  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER)  |
| 196 | DMPC15159087_Speleonectes tulumensis_0 | tissue factor pathway inhibitor-like       | 253 | 3.35E-16 | 51.50% | F:peptidase inhibitor activity; P:blood coagulation; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 5  | IPR002223; IPR020901; PTHR10083 (PANTHER)   |
| 197 | DMPC15159129_Speleonectes tulumensis_0 | superoxide dismutase                       | 246 | 4.46E-22 | 52.00% | P:cell differentiation; P:reproduction; F:antioxidant activity; P:biological_process; F:binding; P:cellular homeostasis; P:cell communication; P:DNA metabolic process; F:catalytic activity; P:multicellular organismal development; C:organelle; C:intracellular; P:metabolic process; P:regulation of biological process; P:biosynthetic process; F:protein binding; P:response to stress; P:cell death; C:cytoplasm; P:transport                               | 20 | IPR001424; IPR024134  |
| 198 | DMPC15159211_Speleonectes tulumensis_1 | epididymal secretory protein e1            | 149 | 5.64E-19 | 60.50% | -  | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 199 | DMPC15159236_Speleonectes tulumensis_0 | dermatopontin 2                            | 121 | 4.24E-12 | 59.90% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 200 | DMPC15159243_Speleonectes tulumensis_0 | trypsinogen 2                              | 193 | 1.37E-34 | 64.80% | -  | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 201 | DMPC15159284_Speleonectes tulumensis_1 | peptidyl-prolyl cis-trans isomerase-like 3 | 155 | 6.74E-53 | 93.30% | P:protein metabolic process; P:nucleobase-containing compound metabolic process; F:catalytic activity; C:nucleus   | 4  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)   |
| 202 | DMPC15159307_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor isoform 7   | 128 | 8.15E-17 | 61.20% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 203 | DMPC15159397_Speleonectes tulumensis_0 | ferritin gfl                               | 136 | 3.09E-27 | 88.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 204 | DMPC15159471_Speleonectes tulumensis_1 | macrophage migration inhibitory factor     | 91  | 4.52E-08 | 66.70% | F:catalytic activity; P:signal transduction; P:regulation of biological process; P:cell death; P:cellular protein modification process; P:behavior; P:response to external stimulus; F:receptor binding; P:cell cycle; P:metabolic process; P:protein transport; P:response to stress; C:extracellular region; C:cell; P:biosynthetic process; P:lipid metabolic process; F:binding; F:molecular_function; P:cell proliferation; P:cellular component organization | 20 | IPR001398; G3DSA:3.30.429.10 (GENE3D), PTHR11954:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                             |
| 205 | DMPC15159481_Speleonectes tulumensis_1 | hypothetical protein DAPPUDRAFT_308200     | 281 | 5.26E-18 | 49.00% | -  | 0  | IPR020234   |



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|-----|--|--|-----|----------|--------|---|----|---|
| 206 | DMPC15159489_Speleonectes tulumensis_1 | gamma-interferon-inducible lysosomal thiol reductase | 143 | 1.29E-26 | 58.80% | -   | 0  | IPR004911; SignalP-NN(euk) (SIGNALP)  |
| 207 | DMPC15159532_Speleonectes tulumensis_0 | upf0378 protein kiaa0100-like                        | 106 | 9.17E-34 | 83.20% | -   | 0  | IPR019443; PTHR15678 (PANTHER)  |
| 208 | DMPC15159533_Speleonectes tulumensis_1 | clotting factor b-like                               | 166 | 1.91E-26 | 59.50% | F:hydrolase activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)  |
| 209 | DMPC15159662_Speleonectes tulumensis_1 | heat shock protein 70                                | 149 | 5.13E-56 | 92.30% | F:protein binding; F:lipid binding; P:organelle organization; P:cell cycle; P:metabolic process; P:regulation of biological process; C:cell; C:nuclear chromosome; P:reproduction; P:cell differentiation; C:nucleus; P:response to stress; P:response to abiotic stimulus; F:nucleotide binding; C:mitochondrion | 15 | IPR013126; G3DSA:3.30.30.30 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), SSF53067 (SUPERFAMILY)                           |
| 210 | DMPC15159824_Speleonectes tulumensis_1 | soma ferritin  | 126 | 9.28E-42 | 77.20% | F:binding   | 1  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 211 | DMPC15159848_Speleonectes tulumensis_2 | dermatopontin 3                                      | 89  | 3.16E-07 | 66.33% | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 212 | DMPC15159898_Speleonectes tulumensis_1 | thioredoxin peroxidase                               | 140 | 4.77E-71 | 88.10% | P:metabolic process; F:antioxidant activity; F:catalytic activity   | 3  | IPR000866; IPR012336; IPR024706; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)  |
| 213 | DMPC15159904_Speleonectes tulumensis_2 | ovarian cysteine protease inhibitor                  | 112 | 1.36E-10 | 55.50% | P:proteolysis; F:peptidase activity   | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 214 | DMPC15159972_Speleonectes tulumensis_0 | dysferlin-interacting protein 1                      | 155 | 3.38E-53 | 68.20% | P:negative regulation of phosphatase activity; F:phosphatase binding  | 2  | IPR002110; IPR020683; PTHR24179 (PANTHER), PTHR24179:SF2 (PANTHER)  |
| 215 | DMPC15160077_Speleonectes tulumensis_2 | ---NA---   | 145 | -        | -      | -   | 0  | IPR002591; IPR017849; IPR017850; IPR024873  |
| 216 | DMPC15160097_Speleonectes tulumensis_0 | nidogen and related basement membrane protein        | 172 | 6.61E-12 | 47.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 217 | DMPC15160132_Speleonectes tulumensis_1 | ---NA---   | 106 | -        | -      | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 218 | DMPC15160149_Speleonectes tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor      | 147 | 2.15E-21 | 51.80% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding  | 6  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 219 | DMPC15160166_Speleonectes tulumensis_1 | epididymal secretory protein e1                      | 149 | 7.47E-19 | 60.50% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 220 | DMPC15160180_Speleonectes tulumensis_2 | hemocyanin subunit type 1 precursor                  | 151 | 1.61E-85 | 68.70% | -   | 0  | IPR005203; IPR013788; IPR014756   |
| 221 | DMPC15160259_Speleonectes tulumensis_2 | hypothetical protein TcasGA2_TC013968                | 190 | 5.05E-11 | 46.17% | -   | 0  | IPR020234; SignalP-NN(euk) (SIGNALP)  |
| 222 | DMPC15160261_Speleonectes tulumensis_2 | adam 19  | 195 | 1.01E-10 | 71.57% | F:hydrolase activity  | 1  | IPR013032; PTHR11905 (PANTHER), PTHR11905:SF15 (PANTHER), tmhmm (TMHMM)   |
| 223 | DMPC15160281_Speleonectes tulumensis_0 | serine protease 137 precursor                        | 86  | 4.52E-12 | 65.60% | F:hydrolase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)     |
| 224 | DMPC15160325_Speleonectes tulumensis_2 | hypothetical protein DAPPUDRAFT_332702               | 272 | 4.97E-80 | 67.00% | -   | 0  | IPR001747; IPR011030; IPR015817; PTHR23345 (PANTHER)  |
| 225 | DMPC15160326_Speleonectes tulumensis_1 | ---NA---   | 127 | -        | -      | -   | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |

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|-----|--|--|-----|-----------|--------|---|---|--|
| 226 | DMPC15160512_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4             | 131 | 4.58E-12  | 56.67% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 227 | DMPC15160527_Speleonectes_tulumensis_1 | zinc proteinase mpc1                                 | 149 | 9.14E-18  | 52.40% | F:hydrolase activity  | 1 | IPR001506; IPR006026; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)       |
| 228 | DMPC15160584_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like      | 102 | 8.30E-18  | 64.50% | -   | 0 | IPR026645  |
| 229 | DMPC15160591_Speleonectes_tulumensis_2 | dnaj homolog subfamily c member 9                    | 119 | 3.74E-38  | 83.30% | P:protein metabolic process; F:protein binding  | 2 | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF16 (PANTHER)  |
| 230 | DMPC15160712_Speleonectes_tulumensis_2 | anti-lipopolsaccharide factor isoform 7              | 108 | 1.31E-16  | 64.60% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 231 | DMPC15160776_Speleonectes_tulumensis_1 | phospholipase a2                                     | 135 | 1.25E-18  | 63.70% | F:hydrolase activity; P:lipid metabolic process   | 2 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP)   |
| 232 | DMPC15160878_Speleonectes_tulumensis_2 | hyaluronidase precursor                              | 159 | 7.90E-28  | 61.40% | P:defense response; P:carbohydrate metabolic process; F:hyaluronoglucosaminidase activity; F:catalytic activity   | 4 | IPR013785; IPR017853; IPR018155; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 233 | DMPC15160904_Speleonectes_tulumensis_1 | ---NA---   | 145 |           |        | -   | 0 | IPR016186; IPR016187; PTHR22803 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 234 | DMPC15160908_Speleonectes_tulumensis_1 | zinc metalloprotease                                 | 145 | 5.10E-36  | 68.50% | F:peptidase activity  | 1 | IPR001570; G3DSA:1.10.390.10 (GENE3D), SSF55486 (SUPERFAMILY)  |
| 235 | DMPC15160971_Speleonectes_tulumensis_2 | plasma glutamate carboxypeptidase                    | 145 | 7.43E-22  | 71.50% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | G3DSA:3.40.630.10 (GENE3D), PTHR12053 (PANTHER), PTHR12053:SF2 (PANTHER)   |
| 236 | DMPC15160990_Speleonectes_tulumensis_2 | perlucin 5   | 147 | 1.01E-11  | 49.20% | F:protein binding   | 1 | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 237 | DMPC15161062_Speleonectes_tulumensis_0 | female neotenic-specific protein 3                   | 139 | 2.91E-09  | 54.75% | -   | 0 | no IPS match   |
| 238 | DMPC15161106_Speleonectes_tulumensis_0 | epidermal retinal dehydrogenase 2                    | 121 | 2.18E-35  | 72.40% | P:metabolic process; F:catalytic activity   | 2 | IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 239 | DMPC15161143_Speleonectes_tulumensis_1 | trypsinogen 2  | 121 | 1.16E-25  | 67.70% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)                    |
| 240 | DMPC15161155_Speleonectes_tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase | 155 | 4.08E-34  | 59.20% | -   | 0 | IPR004911; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 241 | DMPC15161195_Speleonectes_tulumensis_2 | pacifastin-related precursor 4t                      | 122 | 9.43E-08  | 48.00% | -   | 0 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 242 | DMPC15161200_Speleonectes_tulumensis_1 | isoform a  | 285 | 6.94E-34  | 51.20% | P:proteolysis; P:cell proliferation; F:metalloendopeptidase activity; C:cellular_component  | 4 | IPR001590; IPR024079; PTHR11905 (PANTHER), PF13574 (PFAM), SSF55486 (SUPERFAMILY)  |
| 243 | DMPC15161352_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor           | 153 | 2.94E-16  | 58.10% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 244 | DMPC15161373_Speleonectes_tulumensis_2 | protein disulfide isomerase                          | 246 | 1.04E-110 | 87.30% | F:electron carrier activity; P:cellular homeostasis; P:regulation of biological process; P:metabolic process; F:catalytic activity; F:transferase activity; C:endoplasmic reticulum | 7 | IPR005746; IPR005788; IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32 (PANTHER), PF13848 (PFAM)                                   |
| 245 | DMPC15161381_Speleonectes_tulumensis_1 | dermatopontin 2                                      | 204 | 1.33E-31  | 60.80% | -   | 0 | IPR026645; tmhmm (TMHMM)   |
| 246 | DMPC15161438_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_308200               | 159 | 2.84E-09  | 50.00% | -   | 0 | IPR020234  |

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|-----|--|---|-----|----------|--------|---|---|--|
| 247 | DMPC15161626_Speleonectes_tulumensis_1 | serine protease inhibitor kazal-type 6-like   | 157 | 1.24E-08 | 67.67% | -   | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 248 | DMPC15161633_Speleonectes_tulumensis_2 | torsin a  | 98  | 8.09E-33 | 79.60% | -   | 0 | IPR010448; G3DSA:3.40.50.300 (GENE3D), PTHR10760:SF2 (PANTHER)   |
| 249 | DMPC15161672_Speleonectes_tulumensis_2 | hypothetical protein TcasGA2_TC030735   | 93  | 3.81E-07 | 70.00% | -   | 0 | IPR002172; IPR023415; PTHR10529 (PANTHER), PTHR10529:SF113 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 250 | DMPC15161739_Speleonectes_tulumensis_0 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf flags: precursor | 111 | 6.46E-08 | 57.00% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 251 | DMPC15161946_Speleonectes_tulumensis_0 | dermatopontin 3   | 92  | 1.85E-07 | 62.50% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 252 | DMPC15162008_Speleonectes_tulumensis_0 | protein yellow  | 166 | 9.43E-27 | 62.30% | -   | 0 | IPR003534; IPR011042; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 253 | DMPC15162069_Speleonectes_tulumensis_0 | vitellogenin 2  | 297 | 8.13E-29 | 52.00% | P:lipid transport; F:lipid transporter activity   | 2 | IPR001747; IPR015816; IPR015819; PTHR23345 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 254 | DMPC15162299_Speleonectes_tulumensis_2 | trypsin   | 135 | 2.32E-31 | 62.10% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 255 | DMPC15162331_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_300066  | 144 | 1.57E-10 | 51.00% | -   | 0 | IPR015526  |
| 256 | DMPC15162449_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_332702  | 155 | 9.34E-15 | 56.86% | -   | 0 | IPR001747; IPR015816; IPR015819; PTHR13769 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 257 | DMPC15162470_Speleonectes_tulumensis_2 | ecdysteroid-regulated protein   | 153 | 5.97E-25 | 56.50% | -   | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 258 | DMPC15162604_Speleonectes_tulumensis_1 | ferritin-1 heavy chain  | 111 | 8.26E-22 | 89.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process     | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 259 | DMPC15162711_Speleonectes_tulumensis_0 | proclotting enzyme-like   | 309 | 6.50E-48 | 56.60% | F:catalytic activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 260 | DMPC15162780_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate partial  | 66  | 8.54E-12 | 79.60% | F:catalytic activity; P:metabolic process; F:nucleotide binding                                   | 3 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SignalP-NN(euk) (SIGNALP), SSF55347 (SUPERFAMILY)  |
| 261 | DMPC15162825_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4  | 127 | 8.82E-17 | 53.80% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 262 | DMPC15162848_Speleonectes_tulumensis_1 | masquerade-like protein   | 244 | 1.88E-14 | 43.30% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity                         | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF3 (PANTHER)  |
| 263 | DMPC15162864_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor   | 184 | 1.50E-26 | 77.40% | -   | 0 | IPR005203; IPR013788; IPR014756  |
| 264 | DMPC15162912_Speleonectes_tulumensis_0 | ---NA---  | 105 |          |        | -   | 0 | IPR003959; G3DSA:3.40.50.300 (GENE3D), SignalP-NN(euk) (SIGNALP)   |
| 265 | DMPC15162993_Speleonectes_tulumensis_2 | dermatopontin 2   | 97  | 4.68E-08 | 70.00% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 266 | DMPC15163042_Speleonectes_tulumensis_2 | heavy polypeptide 1   | 111 | 2.36E-22 | 89.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process     | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 267 | DMPC15163048_Speleonectes_tulumensis_2 | hepatopancreas partial  | 157 | 7.73E-36 | 73.30% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 268 | DMPC15163133_Speleonectes_tulumensis_0 | dermatopontin 2   | 135 | 2.64E-09 | 60.60% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 269 | DMPC15163197_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor  | 153 | 5.92E-29 | 65.80% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 270 | DMPC15163235_Speleonectes_tulumensis_2 | glyceraldehyde 3-phosphate dehydrogenase  | 177 | 3.57E-35 | 92.30% | F:nucleotide binding; P:carbohydrate metabolic process; F:catalytic activity; P:metabolic process | 4 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), tmhmm (TMHMM), SSF55347 (SUPERFAMILY)  |

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|-----|--|--|-----|----------|--------|---|----|---|
| 271 | DMPC15163246_Speleonectes tulumensis_2 | zinc proteinase mpc1                       | 133 | 7.29E-07 | 45.00% | -   | 0  | IPR001506; IPR024079; PTHR10127 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)  |
| 272 | DMPC15163255_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor             | 152 | 3.40E-29 | 68.50% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 273 | DMPC15163300_Speleonectes tulumensis_1 | 46 kda fk506-binding nuclear protein       | 360 | 2.62E-45 | 77.10% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity  | 3  | IPR001179; IPR023566; G3DSA:3.10.50.40 (GENE3D), PTHR10516:SF125 (PANTHER), SSF54534 (SUPERFAMILY)  |
| 274 | DMPC15163335_Speleonectes tulumensis_0 | c-type lectin 3                            | 150 | 5.24E-10 | 47.57% | F:carbohydrate binding  | 1  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), PTHR22802:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                       |
| 275 | DMPC15163351_Speleonectes tulumensis_0 | platelet-activating factor acetylhydrolase | 257 | 1.81E-25 | 55.50% | P:low-density lipoprotein particle remodeling; F:hydrolase activity; P:lipid catabolic process; C:extracellular region; P:plasma lipoprotein particle oxidation; F:calcium-independent phospholipase A2 activity; P:lipid oxidation; C:low-density lipoprotein particle; P:positive regulation of monocyte chemotaxis; F:1-alkyl-2-acetylglycerophosphocholine esterase activity; F:phospholipid binding; C:extracellular space | 12 | IPR005065; G3DSA:3.40.50.1820 (GENE3D), PTHR10272:SF2 (PANTHER)   |
| 276 | DMPC15163411_Speleonectes tulumensis_1 | mite allergen tyr p 7                      | 227 | 4.30E-14 | 46.70% | -   | 0  | IPR020234   |
| 277 | DMPC15163445_Speleonectes tulumensis_0 | hypothetical protein AaeL_AAEL012633       | 146 | 5.50E-32 | 76.80% | -   | 0  | IPR002172; IPR023415; PTHR10529 (PANTHER), PTHR10529:SF83 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                 |
| 278 | DMPC15163588_Speleonectes tulumensis_1 | 60s ribosomal protein l40                  | 126 | 3.24E-47 | 97.50% | C:ribosome; F:structural molecule activity; P:translation   | 3  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 279 | DMPC15163692_Speleonectes tulumensis_0 | ferritin                                   | 161 | 2.12E-51 | 87.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; IPR014034; SignalP-NN(euk) (SIGNALP)   |
| 280 | DMPC15163724_Speleonectes tulumensis_2 | ---NA---                                   | 139 | -        | -      | -   | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                |
| 281 | DMPC15163947_Speleonectes tulumensis_2 | ---NA---                                   | 152 | -        | -      | -   | 0  | IPR008197; PTHR19441 (PANTHER), PTHR19441:SF8 (PANTHER)   |
| 282 | DMPC15163956_Speleonectes tulumensis_1 | serine protease                            | 283 | 7.56E-20 | 72.20% | F:peptidase activity  | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)      |
| 283 | DMPC15164029_Speleonectes tulumensis_0 | ecdysteroid-regulated protein              | 143 | 6.97E-23 | 58.60% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 284 | DMPC15164047_Speleonectes tulumensis_0 | secreted salivary gland                    | 443 | 7.16E-20 | 50.30% | C:extracellular region; P:pathogenesis  | 2  | IPR004991; IPR023307; tmhmm (TMHMM), SSF56973 (SUPERFAMILY)   |
| 285 | DMPC15164219_Speleonectes tulumensis_2 | hemocyanin subunit type 1 precursor        | 195 | 1.07E-61 | 75.70% | -   | 0  | IPR005203; IPR013788; IPR014756   |
| 286 | DMPC15164292_Speleonectes tulumensis_2 | cathepsin l-like                           | 124 | 1.46E-27 | 87.60% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                     |
| 287 | DMPC15164410_Speleonectes tulumensis_0 | polyubiquitin with 3 ub domains            | 155 | 2.08E-57 | 96.80% | -   | 0  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 288 | DMPC15164580_Speleonectes tulumensis_0 | kazal-type protease inhibitor              | 245 | 2.09E-24 | 51.70% | -   | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 289 | DMPC15164651_Speleonectes tulumensis_0 | neuroendocrine convertase                  | 136 | 1.04E-68 | 84.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3  | IPR002884; IPR008979; IPR015500; PTHR10795:SF11 (PANTHER), SignalP-NN(euk) (SIGNALP)  |

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|-----|--|---|-----|----------|--------|---|---|---|
| 290 | DMPC15164762_Speleonectes_tulumensis_1 | kazal-type protease inhibitor                   | 131 | 1.74E-21 | 54.80% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 291 | DMPC15164788_Speleonectes_tulumensis_2 | c-type lectin 1                                 | 159 | 9.18E-11 | 63.30% | F:carbohydrate binding  | 1 | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER)   |
| 292 | DMPC15164808_Speleonectes_tulumensis_3 | ---NA---  | 163 |          |        | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 293 | DMPC15164814_Speleonectes_tulumensis_1 | beta 1-like 2                                   | 288 | 3.34E-67 | 57.30% | F:hydrolase activity  | 1 | IPR001944; IPR008979; PTHR23421:SF14 (PANTHER)  |
| 294 | DMPC15164848_Speleonectes_tulumensis_1 | enolase   | 133 | 3.52E-25 | 86.30% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process                              | 7 | IPR000941; IPR020811; G3DSA:3.30.390.10 (GENE3D), SSF54826 (SUPERFAMILY)  |
| 295 | DMPC15164897_Speleonectes_tulumensis_2 | membrane glycoprotein lig-                      | 366 | 8.38E-11 | 45.60% | F:hydrolase activity; F:phosphoprotein phosphatase activity; C:integral to membrane   | 3 | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR24367 (PANTHER), PF13855 (PFAM), SignalP-NN(euk) (SIGNALP), SSF52058 (SUPERFAMILY) |
| 296 | DMPC15164938_Speleonectes_tulumensis_2 | zinc finger                                     | 134 | 1.44E-22 | 54.20% | F:nucleic acid binding; F:zinc ion binding; C:intracellular; F:ATP binding; F:protein kinase activity; P:protein phosphorylation; F:transferase activity, transferring phosphorus-containing groups | 7 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), PF13894 (PFAM), SSF57667 (SUPERFAMILY)                            |
| 297 | DMPC15164950_Speleonectes_tulumensis_2 | lipase 3-like                                   | 214 | 9.95E-47 | 69.10% | P:lipid metabolic process; F:hydrolase activity, acting on ester bonds; F:hydrolase activity; P:lipid catabolic process   | 4 | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                        |
| 298 | DMPC15165031_Speleonectes_tulumensis_0 | protein lethal giant larvae-like isoform 2      | 171 | 9.09E-45 | 67.30% | P:multicellular organismal development  | 1 | IPR000664; IPR001680; IPR015943; IPR019775; PTHR10241 (PANTHER), PTHR10241:SF21 (PANTHER)   |
| 299 | DMPC15165128_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like | 133 | 2.75E-12 | 57.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 300 | DMPC15165178_Speleonectes_tulumensis_2 | dermatopontin 2                                 | 96  | 3.71E-09 | 68.14% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 301 | DMPC15165218_Speleonectes_tulumensis_2 | c4b-binding protein beta                        | 130 | 1.37E-34 | 65.70% | F:hydrolase activity  | 1 | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER)   |
| 302 | DMPC15165229_Speleonectes_tulumensis_2 | ---NA---  | 123 |          |        | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), tmhmm (TMHMM)   |
| 303 | DMPC15165243_Speleonectes_tulumensis_2 | anti-lipopolsaccharide factor isoform 7         | 149 | 1.91E-26 | 67.00% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 304 | DMPC15165288_Speleonectes_tulumensis_1 | soma ferritin                                   | 122 | 5.28E-36 | 86.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 305 | DMPC15165290_Speleonectes_tulumensis_1 | dipeptidyl peptidase 9                          | 130 | 5.73E-40 | 92.50% | -   | 0 | IPR001375; G3DSA:3.40.50.1820 (GENE3D), PTHR11731 (PANTHER), PTHR11731:SF9 (PANTHER), SSF53474 (SUPERFAMILY)                            |
| 306 | DMPC15165322_Speleonectes_tulumensis_1 | puromycin-sensitive partial                     | 147 | 6.08E-86 | 90.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process; F:binding   | 4 | IPR001930; IPR014782; IPR015568; G3DSA:1.10.390.10 (GENE3D), SSF55486 (SUPERFAMILY)   |
| 307 | DMPC15165330_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 131 | 6.15E-11 | 57.90% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 308 | DMPC15165391_Speleonectes_tulumensis_0 | carboxypeptidase b-like                         | 210 | 6.68E-64 | 68.40% | -   | 0 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)            |
| 309 | DMPC15165423_Speleonectes_tulumensis_2 | pancreatic lipase-related protein 2             | 188 | 1.53E-32 | 52.80% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; F:triglyceride lipase activity; C:extracellular region   | 5 | IPR000734; IPR001024; IPR002331; IPR008976; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)                              |
| 310 | DMPC15165503_Speleonectes_tulumensis_2 | ---NA---  | 148 |          |        | -   | 0 | IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

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|-----|--|---|-----|----------|--------|--|----|--|
| 311 | DMPC15165548_Speleonectes_tulumensis_2 | grn protein                                     | 114 | 1.37E-14 | 59.50% | -  | 0  | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 312 | DMPC15165570_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 119 | 1.70E-13 | 55.70% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:proteolysis; F:peptidase activity   | 6  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 313 | DMPC15165662_Speleonectes_tulumensis_1 | upf0670 protein cg4666-like                     | 140 | 9.41E-10 | 54.30% | -  | 0  | PTHR12475 (PANTHER), tmhmm (TMHMM)   |
| 314 | DMPC15165700_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor isoform 7        | 138 | 2.97E-31 | 67.90% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 315 | DMPC15165742_Speleonectes_tulumensis_2 | ribosomal protein s27a                          | 145 | 5.43E-47 | 99.40% | C:ribosome; F:structural molecule activity; P:translation  | 3  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)                    |
| 316 | DMPC15165751_Speleonectes_tulumensis_2 | serine protease inhibitor kazal-type 6-like     | 140 | 8.22E-07 | 71.00% | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 317 | DMPC15165770_Speleonectes_tulumensis_2 | loc496089 protein                               | 242 | 9.66E-61 | 94.10% | P:metabolic process; F:antioxidant activity; F:catalytic activity  | 3  | IPR000866; IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER)   |
| 318 | DMPC15165819_Speleonectes_tulumensis_2 | cathepsin 1                                     | 94  | 9.05E-44 | 82.70% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 319 | DMPC15165851_Speleonectes_tulumensis_2 | protein twisted gastrulation                    | 77  | 2.90E-32 | 80.70% | -  | 0  | IPR006761; PTHR12312:SF4 (PANTHER)   |
| 320 | DMPC15165898_Speleonectes_tulumensis_1 | ubiquitin-40s ribosomal protein s27a            | 151 | 1.72E-65 | 97.00% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                    |
| 321 | DMPC15165914_Speleonectes_tulumensis_2 | mantle protein 9                                | 152 | 1.51E-08 | 67.75% | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)                          |
| 322 | DMPC15165962_Speleonectes_tulumensis_0 | protein   | 130 | 1.63E-18 | 52.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 323 | DMPC15166091_Speleonectes_tulumensis_0 | ale o 1 allergen                                | 113 | 9.27E-14 | 90.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 324 | DMPC15166109_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                  | 140 | 3.22E-30 | 67.10% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 325 | DMPC15166131_Speleonectes_tulumensis_1 | copa partial                                    | 225 | 1.55E-82 | 82.30% | F:protein kinase activity; P:transport; P:protein transport; C:Golgi apparatus; C:protein complex; C:cytoplasmic membrane-bounded vesicle; F:structural molecule activity  | 7  | IPR010714; PTHR19876 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

|     |  |  |     |           |        |   |   |   |
|-----|--|--|-----|-----------|--------|---|---|---|
| 326 | DMPC15166149_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor       | 131 | 7.93E-19  | 62.20% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 327 | DMPC15166154_Speleonectes_tulumensis_2 | heat shock 70 kda protein cognate 4              | 285 | 1.77E-122 | 95.80% | -   | 0 | IPR013126; G3DSA:1.20.1270.10 (GENE3D), G3DSA:2.60.34.10 (GENE3D), PTHR19375 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100920 (SUPERFAMILY), SSF100934 (SUPERFAMILY) |
| 328 | DMPC15166174_Speleonectes_tulumensis_0 | zinc finger protein interacting with k protein 1 | 154 | 1.18E-19  | 60.80% | F:binding   | 1 | IPR007087; IPR013087; IPR015880; PTHR24402 (PANTHER), PTHR24402:SF3 (PANTHER), PF13465 (PFAM), PF13894 (PFAM), SSF57667 (SUPERFAMILY)                               |
| 329 | DMPC15166340_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_308200           | 142 | 5.43E-10  | 50.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 330 | DMPC15166364_Speleonectes_tulumensis_0 | plasminogen activator spa                        | 105 | 1.80E-17  | 67.90% | P:metabolic process; F:catalytic activity   | 2 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 331 | DMPC15166391_Speleonectes_tulumensis_1 | ---NA---   | 105 |           |        | -   | 0 | IPR001254; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)  |
| 332 | DMPC15166468_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor              | 152 | 2.37E-59  | 70.20% | -   | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 333 | DMPC15166472_Speleonectes_tulumensis_0 | ---NA---   | 153 |           |        | -   | 0 | IPR001211; IPR013090; IPR016090   |
| 334 | DMPC15166497_Speleonectes_tulumensis_2 | isoform a  | 131 | 5.50E-19  | 56.60% | P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:peptidase activity; F:metalloendopeptidase activity; P:cell proliferation; C:cellular component | 7 | IPR001590; IPR024079; PTHR13723 (PANTHER), PF13574 (PFAM), SSF55486 (SUPERFAMILY)   |
| 335 | DMPC15166553_Speleonectes_tulumensis_0 | retinol dehydrogenase 14-like                    | 163 | 1.40E-11  | 68.40% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding   | 4 | IPR016040; PTHR24320 (PANTHER), PTHR24320:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY)  |
| 336 | DMPC15166686_Speleonectes_tulumensis_1 | 5 ecto-like                                      | 122 | 2.23E-11  | 67.10% | F:hydrolase activity; F:binding; P:nucleobase-containing compound metabolic process; P:catabolic process; F:nucleotide binding                                      | 5 | IPR006146; IPR006179; G3DSA:3.60.21.10 (GENE3D), tmhmm (TMHMM), SSF56300 (SUPERFAMILY)  |
| 337 | DMPC15166755_Speleonectes_tulumensis_2 | heat shock cognate 70                            | 195 | 7.04E-44  | 92.10% | -   | 0 | IPR013126; G3DSA:1.20.1270.10 (GENE3D), PTHR19375 (PANTHER), tmhmm (TMHMM), SSF100934 (SUPERFAMILY)   |
| 338 | DMPC15166855_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200           | 140 | 4.48E-09  | 51.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 339 | DMPC15166875_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                   | 152 | 9.20E-30  | 68.40% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 340 | DMPC15166980_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor       | 139 | 1.86E-13  | 57.00% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 341 | DMPC15166982_Speleonectes_tulumensis_1 | hemocyanin subunit type 2 precursor              | 103 | 4.79E-50  | 72.60% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 342 | DMPC15167041_Speleonectes_tulumensis_0 | zinc finger protein                              | 127 | 5.34E-15  | 54.60% | F:nucleic acid binding; F:zinc ion binding; C:intracellular   | 3 | IPR007087; IPR013087; IPR015880; PTHR24401 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 343 | DMPC15167091_Speleonectes_tulumensis_2 | zinc metalloprotease                             | 112 | 1.97E-23  | 71.80% | F:peptidase activity  | 1 | IPR001570; G3DSA:1.10.390.10 (GENE3D), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)  |
| 344 | DMPC15167134_Speleonectes_tulumensis_0 | chitinase partial                                | 175 | 3.31E-67  | 70.10% | -   | 0 | IPR001223; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)  |
| 345 | DMPC15167141_Speleonectes_tulumensis_1 | adp-ribosylation factor-like protein 1-like      | 331 | 1.73E-119 | 96.10% | C:intracellular; F:nucleotide binding; P:signal transduction  | 3 | IPR003579; IPR005225; IPR006687; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER), PTHR11711:SF41 (PANTHER)                         |

|     |  |  |     |           |        |   |   |   |
|-----|--|--|-----|-----------|--------|---|---|---|
| 346 | DMPC15167290_Speleonectes tulumensis_1 | vitellogenin 1                                   | 98  | 6.16E-16  | 61.38% | -   | 0 | IPR001846   |
| 347 | DMPC15167314_Speleonectes tulumensis_1 | hemocyanin subunit type 2 precursor              | 120 | 8.59E-25  | 79.80% | -   | 0 | IPR000896; IPR008922; IPR013788   |
| 348 | DMPC15167326_Speleonectes tulumensis_2 | hypothetical protein TcasGA2_TC013968            | 150 | 4.92E-07  | 55.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 349 | DMPC15167369_Speleonectes tulumensis_2 | dermatopontin 2                                  | 104 | 5.36E-08  | 68.22% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 350 | DMPC15167372_Speleonectes tulumensis_1 | glutathione peroxidase                           | 112 | 6.57E-11  | 59.70% | F:catalytic activity  | 1 | IPR000889; IPR012336; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 351 | DMPC15167423_Speleonectes tulumensis_1 | serine protease                                  | 126 | 8.96E-16  | 60.30% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 352 | DMPC15167475_Speleonectes tulumensis_1 | proclotting enzyme-like                          | 143 | 2.90E-17  | 67.20% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER)   |
| 353 | DMPC15167504_Speleonectes tulumensis_1 | myosin heavy muscle                              | 411 | 2.05E-94  | 90.60% | C:cytoskeleton; C:protein complex; F:motor activity   | 3 | IPR002928; PTHR13140 (PANTHER), PTHR13140:SF106 (PANTHER), tmhmm (TMHMM)  |
| 354 | DMPC15167609_Speleonectes tulumensis_1 | limbic system-associated membrane protein        | 112 | 4.10E-13  | 54.50% | -   | 0 | IPR007110; IPR013098; IPR013783; PTHR10489 (PANTHER), PF13895 (PFAM), SignalP-NN(euk) (SIGNALP), SSF48726 (SUPERFAMILY)   |
| 355 | DMPC15167624_Speleonectes tulumensis_2 | sjchgc02838 protein                              | 322 | 3.67E-50  | 53.40% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity                | 4 | IPR013781   |
| 356 | DMPC15167630_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor-like  | 141 | 7.06E-21  | 59.90% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 357 | DMPC15167633_Speleonectes tulumensis_0 | pancreatic lipase-related protein 1              | 228 | 4.76E-22  | 50.80% | F:hydrolase activity  | 1 | IPR000734; IPR001024; IPR002331; IPR008976; IPR013818; G3DSA:3.40.50.1820 (GENE3D)  |
| 358 | DMPC15167700_Speleonectes tulumensis_0 | ga22152  | 359 | 1.03E-10  | 71.60% | F:kinase activity; P:metabolic process  | 2 | IPR001576; IPR015824  |
| 359 | DMPC15167700_Speleonectes tulumensis_1 | phosphoglycerate kinase                          | 358 | 4.45E-112 | 86.80% | P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; P:metabolic process; F:kinase activity | 5 | IPR001576; IPR015901  |
| 360 | DMPC15167787_Speleonectes tulumensis_2 | ---NA---   | 134 |           |        | -   | 0 | IPR026645   |
| 361 | DMPC15167844_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor                   | 140 | 5.67E-31  | 68.10% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 362 | DMPC15167887_Speleonectes tulumensis_2 | chymotrypsin-like elastase family member 2a-like | 101 | 2.10E-13  | 76.30% | C:cell; P:protein metabolic process; P:catabolic process; F:peptidase activity  | 4 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 363 | DMPC15167984_Speleonectes tulumensis_2 | thioredoxin-like protein                         | 102 | 2.79E-25  | 82.00% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process              | 5 | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)  |
| 364 | DMPC15168025_Speleonectes tulumensis_1 | transmembrane serine protease                    | 263 | 2.12E-33  | 52.20% | F:catalytic activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP)     |
| 365 | DMPC15168027_Speleonectes tulumensis_0 | xanthine dehydrogenase oxidase                   | 94  | 8.50E-09  | 76.67% | -   | 0 | PTHR11908 (PANTHER), PTHR11908:SF9 (PANTHER)  |
| 366 | DMPC15168034_Speleonectes tulumensis_1 | hypothetical protein TcasGA2_TC013968            | 147 | 1.72E-07  | 55.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 367 | DMPC15168140_Speleonectes tulumensis_0 | nidogen 1  | 141 | 8.90E-11  | 67.50% | P:proteolysis; F:peptidase activity   | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 368 | DMPC15168200_Speleonectes tulumensis_0 | carbonic anhydrase 1                             | 169 | 4.19E-52  | 70.50% | F:binding; F:catalytic activity   | 2 | IPR001148; IPR018338; IPR018436; IPR023561  |



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|-----|--|--|-----|----------|--------|---|---|---|
| 369 | DMPC15168236_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor          | 135 | 2.15E-21 | 52.70% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 370 | DMPC15168296_Speleonectes_tulumensis_1 | alkaline serine exoprotease a                            | 160 | 3.79E-22 | 66.40% | F:peptidase activity  | 1 | IPR007280; SignalP-NN(euk) (SIGNALP)  |
| 371 | DMPC15168327_Speleonectes_tulumensis_2 | pacifastin-related serine protease inhibitor precursor   | 156 | 1.52E-16 | 51.10% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity   | 2 | IPR008037; IPR016307; IPR020862; SignalP-NN(euk) (SIGNALP)  |
| 372 | DMPC15168354_Speleonectes_tulumensis_1 | dopamine beta hydroxylase                                | 233 | 2.57E-37 | 56.90% | F:catalytic activity  | 1 | IPR000945; IPR005018; IPR008960; IPR015920; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 373 | DMPC15168377_Speleonectes_tulumensis_2 | coiled-coil domain-containing protein 134                | 106 | 1.03E-28 | 67.90% | -   | 0 | IPR026321; PTHR14735:SF0 (PANTHER)  |
| 374 | DMPC15168444_Speleonectes_tulumensis_0 | membrane metallo-endopeptidase-like 1-like               | 124 | 1.87E-24 | 85.00% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000718; IPR018497; IPR024079; PTHR11733:SF48 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF55486 (SUPERFAMILY) |
| 375 | DMPC15168472_Speleonectes_tulumensis_0 | macrophage migration inhibitory factor                   | 270 | 4.13E-15 | 71.00% | -   | 0 | IPR001398; IPR014347; G3DSA:3.30.429.10 (GENE3D), PTHR11954:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                        |
| 376 | DMPC15168489_Speleonectes_tulumensis_1 | trypsin  | 151 | 3.54E-37 | 71.60% | F:catalytic activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)  |
| 377 | DMPC15168501_Speleonectes_tulumensis_1 | isoamyl acetate-hydrolyzing esterase 1 homolog           | 174 | 2.61E-38 | 64.50% | F:hydrolase activity; P:lipid metabolic process; F:hydrolase activity, acting on ester bonds  | 3 | IPR001087; IPR013831; PTHR14209 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF52266 (SUPERFAMILY)                                |
| 378 | DMPC15168555_Speleonectes_tulumensis_0 | ---NA---   | 146 |          |        | -   | 0 | IPR000566; IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 379 | DMPC15168566_Speleonectes_tulumensis_1 | glutaredoxin 3   | 98  | 2.55E-17 | 66.60% | P:biological_process; F:protein binding; P:regulation of biological process   | 3 | IPR004480; IPR012336; IPR013766; PTHR10293:SF17 (PANTHER)   |
| 380 | DMPC15168600_Speleonectes_tulumensis_0 | ---NA---   | 78  |          |        | -   | 0 | no IPS match  |
| 381 | DMPC15168608_Speleonectes_tulumensis_1 | sifa preprohormone                                       | 138 | 9.78E-18 | 74.50% | -   | 0 | tmhmm (TMHMM)   |
| 382 | DMPC15168627_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor                      | 154 | 5.75E-87 | 67.70% | -   | 0 | IPR005204; IPR013788; PTHR11511:SF20 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                    |
| 383 | DMPC15168765_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor          | 140 | 8.85E-17 | 51.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 384 | DMPC15168767_Speleonectes_tulumensis_0 | gamma-glutamyl hydrolase-like                            | 155 | 3.33E-15 | 65.00% | F:hydrolase activity  | 1 | IPR011697; IPR015527; G3DSA:3.40.50.880 (GENE3D), PTHR11315:SF0 (PANTHER)   |
| 385 | DMPC15168773_Speleonectes_tulumensis_1 | dnaj homolog subfamily b member 5-partial                | 89  | 2.95E-13 | 90.00% | P:protein metabolic process; F:protein binding  | 2 | IPR001623; PTHR24077 (PANTHER), PTHR24077:SF6 (PANTHER)   |
| 386 | DMPC15168816_Speleonectes_tulumensis_0 | soma ferritin  | 104 | 4.38E-24 | 87.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 387 | DMPC15168834_Speleonectes_tulumensis_0 | cd74 major histocompatibility class ii invariant chain a | 135 | 7.00E-08 | 67.67% | P:multicellular organismal development  | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                     |
| 388 | DMPC15168909_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor               | 109 | 7.78E-08 | 61.71% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 389 | DMPC15168933_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like          | 142 | 3.62E-11 | 62.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 390 | DMPC15168951_Speleonectes_tulumensis_0 | perlucin 5   | 149 | 6.18E-11 | 49.90% | F:protein binding   | 1 | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                              |
| 391 | DMPC15169038_Speleonectes_tulumensis_2 | loc100145034 protein                                     | 183 | 1.10E-11 | 49.30% | F:phosphonase activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region                    | 5 | IPR001211; IPR016090; PTHR12253:SF5 (PANTHER)   |

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|-----|--|--|-----|----------|--------|--|----|---|
| 392 | DMPC15169043_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4   | 104 | 1.48E-11 | 66.00% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 393 | DMPC15169049_Speleonectes_tulumensis_2 | glutathione peroxidase 1   | 119 | 1.24E-55 | 80.20% | P:response to external stimulus; P:anatomical structure morphogenesis; P:multicellular organismal development; P:response to stress; P:response to abiotic stimulus; P:cell proliferation; P:catabolic process; P:regulation of biological process; P:cell death; P:cell differentiation; P:biological_process; P:cellular protein modification process; P:nucleobase-containing compound metabolic process; C:cytosol; F:catalytic activity; F:antioxidant activity; P:growth; P:cellular homeostasis; ; P:lipid metabolic process; F:enzyme regulator activity; P:mitochondrion organization; F:protein binding; P:regulation of gene expression, epigenetic; P:signal transduction; C:mitochondrion | 26 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)   |
| 394 | DMPC15169200_Speleonectes_tulumensis_0 | cathepsin 1-like   | 183 | 2.02E-19 | 86.30% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 395 | DMPC15169261_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor   | 109 | 5.89E-14 | 63.20% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 396 | DMPC15169274_Speleonectes_tulumensis_0 | anti-lipoplysaccharide factor isoform 7  | 126 | 1.23E-18 | 63.40% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 397 | DMPC15169350_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor   | 145 | 9.96E-24 | 58.10% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 398 | DMPC15169420_Speleonectes_tulumensis_0 | soma ferritin  | 123 | 1.31E-30 | 88.10% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 399 | DMPC15169439_Speleonectes_tulumensis_1 | ferritin subunit   | 105 | 6.88E-22 | 89.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 400 | DMPC15169593_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like  | 144 | 5.76E-22 | 59.10% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 401 | DMPC15169648_Speleonectes_tulumensis_1 | ferritin h subunit   | 107 | 1.34E-19 | 88.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 402 | DMPC15169696_Speleonectes_tulumensis_2 | epididymal secretory protein e1 isoform 1  | 145 | 1.20E-23 | 56.30% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 403 | DMPC15169704_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor   | 123 | 8.36E-11 | 60.20% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 404 | DMPC15169724_Speleonectes_tulumensis_0 | dermatopontin 3  | 130 | 2.67E-16 | 60.70% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 405 | DMPC15169738_Speleonectes_tulumensis_2 | zinc finger protein 271 (zinc finger protein 7) (zinc finger protein znfp133) (epstein-barr virus-induced zinc finger protein) (znf-eb) (ct-zfp48) (zinc finger protein) | 128 | 3.54E-16 | 60.60% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13894 (PFAM), SSF57667 (SUPERFAMILY)  |
| 406 | DMPC15169774_Speleonectes_tulumensis_0 | dermatopontin 3  | 95  | 3.51E-08 | 67.50% | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 407 | DMPC15169802_Speleonectes_tulumensis_5 | glutathione peroxidase 1   | 125 | 3.60E-21 | 82.60% | -  | 0  | IPR000889; IPR012336; tmhmm (TMHMM)   |

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|-----|--|---|-----|----------|--------|---|----|--|
| 408 | DMPC15169828_Speleonectes_tulumensis_1 | zgc:66168 partial                               | 120 | 1.08E-42 | 99.40% | -   | 0  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)                |
| 409 | DMPC15169838_Speleonectes_tulumensis_1 | cysteine-rich motor neuron 1 protein            | 130 | 1.12E-25 | 69.40% | C:extracellular region; F:protein binding; P:regulation of biological process; P:cell growth  | 4  | IPR000867; IPR011390; PTHR14186:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 410 | DMPC15169873_Speleonectes_tulumensis_0 | phospholipase major isoenzyme-like              | 142 | 1.78E-13 | 68.70% | F:ribosynthetic process; F:lipid metabolic process; C:cytoplasmic membrane-bounded vesicle; P:response to endogenous stimulus; F:hydrolase activity; F:calcium ion binding; P:regulation of biological process; P:DNA metabolic process; P:catabolic process; ; C:extracellular space; P:transport; F:receptor binding; F:binding | 14 | IPR001211; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 411 | DMPC15169895_Speleonectes_tulumensis_0 | protein 60a-like                                | 108 | 1.57E-14 | 55.80% | -   | 0  | IPR001839; IPR015615; PTHR11848:SF55 (PANTHER)   |
| 412 | DMPC15169921_Speleonectes_tulumensis_2 | lectin b isoform 2                              | 144 | 5.55E-10 | 54.70% | F:carbohydrate binding  | 1  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 413 | DMPC15170017_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 140 | 3.74E-19 | 53.10% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 414 | DMPC15170112_Speleonectes_tulumensis_0 | ---NA---  | 117 |          |        | -   | 0  | IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 415 | DMPC15170184_Speleonectes_tulumensis_1 | upf0670 protein cg4666-like                     | 84  | 3.69E-10 | 65.00% | F:molecular_function; P:biological_process; C:cellular_component  | 3  | PTHR12475 (PANTHER), PTHR12475:SF3 (PANTHER), tmhmm (TMHMM)  |
| 416 | DMPC15170221_Speleonectes_tulumensis_2 | aminoacylase-1-like isoform 1                   | 283 | 3.54E-91 | 73.30% | P:primary metabolic process; F:hydrolase activity   | 2  | IPR001261; IPR002933; IPR011650; G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF53187 (SUPERFAMILY) |
| 417 | DMPC15170228_Speleonectes_tulumensis_2 | trypsin partial                                 | 130 | 1.04E-11 | 57.90% | F:hydrolase activity  | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)                                     |
| 418 | DMPC15170269_Speleonectes_tulumensis_1 | kallikrein isoform cra_b                        | 122 | 3.47E-10 | 55.80% | F:peptidase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)  |
| 419 | DMPC15170341_Speleonectes_tulumensis_0 | ecdysteroid-regulated protein                   | 142 | 4.13E-20 | 61.50% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER)  |
| 420 | DMPC15170355_Speleonectes_tulumensis_1 | zinc finger protein 300-like                    | 82  | 7.95E-13 | 59.30% | F:nucleic acid binding; F:zinc ion binding; C:intracellular; C:nucleus  | 4  | IPR007087; IPR013087; IPR015880; PTHR24402 (PANTHER), PTHR24402:SF3 (PANTHER), PF13894 (PFAM), SSF57667 (SUPERFAMILY)  |
| 421 | DMPC15170413_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor | 148 | 3.32E-22 | 52.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding  | 6  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 422 | DMPC15170422_Speleonectes_tulumensis_2 | ---NA---  | 128 |          |        | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 423 | DMPC15170455_Speleonectes_tulumensis_0 | serine protease 14                              | 94  | 1.63E-13 | 71.00% | F:peptidase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 424 | DMPC15170506_Speleonectes_tulumensis_1 | zinc metalloprotease                            | 160 | 3.59E-15 | 58.80% | F:peptidase activity  | 1  | IPR007280  |
| 425 | DMPC15170510_Speleonectes_tulumensis_1 | epididymal secretory protein e1 isoform 1       | 148 | 4.52E-24 | 57.70% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

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|-----|--|---|-----|-----------|--------|--|---|---|
| 426 | DMPC15170537_Speleonectes_tulumensis_1 | partial   | 117 | 1.21E-40  | 73.40% | P:oxidation-reduction process; F:heme binding; P:response to oxidative stress; F:peroxidase activity                               | 4 | IPR002007; IPR010255; IPR019791; PTHR11475 (PANTHER)  |
| 427 | DMPC15170590_Speleonectes_tulumensis_0 | trypsin-like serine proteinase 1                    | 133 | 4.47E-22  | 63.40% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 428 | DMPC15170691_Speleonectes_tulumensis_0 | maltase- intestinal-like                            | 156 | 1.13E-17  | 64.70% | F:catalytic activity   | 1 | IPR000322   |
| 429 | DMPC15170704_Speleonectes_tulumensis_0 | techylectin-5b isoform                              | 313 | 1.05E-53  | 66.20% | -  | 0 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 430 | DMPC15170788_Speleonectes_tulumensis_1 | cathepsin 1   | 304 | 6.02E-109 | 72.40% | -  | 0 | IPR000169; IPR000668; IPR013128; IPR013201; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 431 | DMPC15170859_Speleonectes_tulumensis_2 | tyrosine--trna cytoplasmic-like                     | 225 | 7.10E-80  | 74.60% | F:catalytic activity; P:translation; P:nucleobase-containing compound metabolic process; ; F:nucleotide binding                    | 5 | IPR002547; IPR012340; IPR023617; PTHR11946 (PANTHER)  |
| 432 | DMPC15170921_Speleonectes_tulumensis_0 | trypsin 3   | 163 | 2.81E-56  | 76.40% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)   |
| 433 | DMPC15170987_Speleonectes_tulumensis_2 | tpa_inf: fibrinogen-related protein 2               | 114 | 1.91E-24  | 68.40% | F:receptor binding; C:extracellular space; P:signal transduction   | 3 | IPR002181; IPR014715; IPR020837; PTHR19143 (PANTHER)  |
| 434 | DMPC15171035_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like     | 136 | 3.23E-10  | 61.20% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 435 | DMPC15171043_Speleonectes_tulumensis_2 | dermatopontin 3                                     | 100 | 5.26E-09  | 63.13% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 436 | DMPC15171055_Speleonectes_tulumensis_0 | kazal-type protease inhibitor                       | 112 | 3.18E-14  | 56.50% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 437 | DMPC15171060_Speleonectes_tulumensis_1 | peptidase s8 and sedolisin                          | 193 | 2.94E-22  | 68.30% | F:peptidase activity   | 1 | IPR007280   |
| 438 | DMPC15171081_Speleonectes_tulumensis_1 | dermatopontin 3                                     | 150 | 9.98E-20  | 60.60% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 439 | DMPC15171218_Speleonectes_tulumensis_1 | h-2 class ii histocompatibility antigen gamma chain | 110 | 1.64E-08  | 66.00% | P:multicellular organismal development   | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 440 | DMPC15171224_Speleonectes_tulumensis_0 | nas-15 protein                                      | 217 | 1.32E-25  | 60.90% | F:hydrolase activity   | 1 | IPR001506; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)  |
| 441 | DMPC15171239_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                      | 155 | 2.08E-29  | 67.50% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 442 | DMPC15171253_Speleonectes_tulumensis_0 | thioredoxin 1                                       | 165 | 1.48E-51  | 83.80% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process | 5 | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-NN(euk) (SIGNALP)   |
| 443 | DMPC15171262_Speleonectes_tulumensis_2 | aldehyde dehydrogenase mitochondrial-like           | 213 | 2.98E-45  | 85.50% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER), tmhmm (TMHMM)   |
| 444 | DMPC15171342_Speleonectes_tulumensis_2 | aspartic proteinase                                 | 130 | 4.59E-34  | 65.70% | C:cytoplasmic membrane-bounded vesicle   | 1 | IPR001461; IPR001969; IPR021109; PTHR13683:SF84 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 445 | DMPC15171360_Speleonectes_tulumensis_2 | ---NA---  | 151 | -         | -      | -  | 0 | IPR000566; IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 446 | DMPC15171417_Speleonectes_tulumensis_1 | oocyte protease inhibitor-1 precursor               | 133 | 1.04E-09  | 68.10% | P:metabolic process  | 1 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 447 | DMPC15171448_Speleonectes_tulumensis_2 | ---NA---  | 46  | -         | -      | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SSF100895 (SUPERFAMILY)  |

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| 448 | DMPC15171476_Speleonectes tulumensis_0 | saxiphilin precursor                                    | 126 | 7.17E-11 | 65.20% | P:proteolysis; F:peptidase activity   | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 449 | DMPC15171503_Speleonectes tulumensis_1 | hemocyanin subunit type 1 precursor                     | 128 | 1.24E-58 | 75.30% | -   | 0  | IPR005203; IPR013788; IPR014756  |
| 450 | DMPC15171706_Speleonectes tulumensis_1 | retinal dehydrogenase 1                                 | 169 | 3.77E-63 | 81.30% | C:cytoplasm; F:catalytic activity; P:lipid metabolic process; P:secondary metabolic process; P:metabolic process  | 5  | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)   |
| 451 | DMPC15171725_Speleonectes tulumensis_2 | hemocyanin subunit type 1 precursor                     | 145 | 4.08E-53 | 68.20% | -   | 0  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 452 | DMPC15171826_Speleonectes tulumensis_0 | kazal-type serine proteinase inhibitor 4                | 126 | 9.63E-16 | 54.60% | -   | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 453 | DMPC15171827_Speleonectes tulumensis_1 | plasminogen activator spa                               | 89  | 3.80E-08 | 56.80% | F:catalytic activity  | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER), PTHR24272:SF11 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 454 | DMPC15171832_Speleonectes tulumensis_2 | chondroitin sulfate synthase 1                          | 120 | 8.21E-25 | 68.30% | C:Golgi cisterna membrane; F:transferase activity, transferring hexosyl groups  | 2  | IPR008428; G3DSA:3.90.550.10 (GENE3D), PTHR12369:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 455 | DMPC15171842_Speleonectes tulumensis_2 | ---NA---  | 297 |          |        | -   | 0  | IPR001283; IPR014044; IPR018244; tmhmm (TMHMM)   |
| 456 | DMPC15171843_Speleonectes tulumensis_1 | chloride channel calcium activated 2-like               | 553 | 5.30E-21 | 55.20% | -   | 0  | IPR003961; IPR013783; PTHR10579 (PANTHER), PTHR10579:SF8 (PANTHER), tmhmm (TMHMM)  |
| 457 | DMPC15171847_Speleonectes tulumensis_1 | ---NA---  | 141 |          |        | -   | 0  | IPR000562; IPR013806; PTHR22803 (PANTHER), PTHR22803:SF17 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                            |
| 458 | DMPC15171946_Speleonectes tulumensis_0 | ecdysteroid-regulated 16 kda protein                    | 229 | 2.52E-16 | 54.30% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER)  |
| 459 | DMPC15171986_Speleonectes tulumensis_0 | er-type hsp70   | 149 | 1.13E-43 | 75.40% | P:signal transduction; F:protein binding; C:endoplasmic reticulum; C:cell; P:regulation of biological process; P:cellular protein modification process; P:response to stress; C:protein complex; P:multicellular organismal development; F:nucleotide binding | 10 | IPR013126; G3DSA:2.60.34.10 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF100920 (SUPERFAMILY)                              |
| 460 | DMPC15172053_Speleonectes tulumensis_1 | ---NA---  | 145 |          |        | -   | 0  | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 461 | DMPC15172056_Speleonectes tulumensis_1 | trypsin-like serine proteinase 2                        | 265 | 2.19E-40 | 54.10% | -   | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)                    |
| 462 | DMPC15172075_Speleonectes tulumensis_2 | mannose-binding protein a-like                          | 120 | 6.60E-14 | 54.50% | F:carbohydrate binding  | 1  | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER)  |
| 463 | DMPC15172107_Speleonectes tulumensis_1 | dermatopontin 2   | 141 | 3.39E-10 | 59.30% | -   | 0  | IPR026645; tmhmm (TMHMM)   |
| 464 | DMPC15172136_Speleonectes tulumensis_2 | hemagglutinin amebocyte aggregation factor              | 136 | 3.50E-16 | 57.50% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 465 | DMPC15172207_Speleonectes tulumensis_0 | chymotrypsin-like elastase family member 2a             | 226 | 1.15E-19 | 56.90% | F:catalytic activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)     |
| 466 | DMPC15172211_Speleonectes tulumensis_0 | glycosyl-phosphatidylinositol-linked carbonic anhydrase | 116 | 2.56E-13 | 55.50% | F:carbonate dehydratase activity  | 1  | IPR001148; IPR023561; SignalP-NN(euk) (SIGNALP)  |
| 467 | DMPC15172216_Speleonectes tulumensis_2 | epididymal secretory protein e1 precursor               | 153 | 1.03E-26 | 55.80% | C:extracellular region  | 1  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|     |  |  |     |          |        |                        |    |  |   |
|-----|--|--|-----|----------|--------|------------------------|----|--|---|
| 468 | DMPC15172265_Speleonectes_tulumensis_1 | ubiquitin-40s ribosomal protein s27a                 | 153 | 2.07E-56 | 96.70% |                        | 27 | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                         |
| 469 | DMPC15172267_Speleonectes_tulumensis_2 | serine proteinase stubble-like                       | 123 | 8.30E-19 | 53.40% | -                      | 0  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding   | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)  |
| 470 | DMPC15172357_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4             | 134 | 1.03E-12 | 64.00% | -                      | 0  | F:structural molecule activity; F:protein kinase activity; C:cytoskeleton; C:protein complex; P:cellular protein modification process; F:nucleotide binding  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 471 | DMPC15172383_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor           | 280 | 3.38E-12 | 65.30% | -                      | 0  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding   | tmhmm (TMHMM)   |
| 472 | DMPC15172398_Speleonectes_tulumensis_0 | inactive hydroxysteroid dehydrogenase-like protein 1 | 194 | 3.44E-57 | 72.00% | -                      | 0  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding   | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF68 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 473 | DMPC15172464_Speleonectes_tulumensis_2 | protein  | 146 | 5.17E-21 | 53.50% |                        | 6  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding   | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 474 | DMPC15172474_Speleonectes_tulumensis_5 | stretchin- isoform s                                 | 151 | 5.52E-42 | 86.70% |                        | 6  | F:structural molecule activity; F:protein kinase activity; C:cytoskeleton; C:protein complex; P:cellular protein modification process; F:nucleotide binding  | IPR007110; IPR013783; IPR020675; IPR020682; PF13895 (PFAM), SSF48726 (SUPERFAMILY)  |
| 475 | DMPC15172502_Speleonectes_tulumensis_1 | ferritin gf1   | 112 | 9.52E-23 | 86.70% |                        | 5  | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 476 | DMPC15172555_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor      | 196 | 1.60E-19 | 50.80% |                        | 4  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | IPR000716; PTHR12352 (PANTHER), tmhmm (TMHMM)   |
| 477 | DMPC15172601_Speleonectes_tulumensis_1 | cathepsin 1  | 129 | 9.23E-59 | 78.40% | -                      | 0  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                              |
| 478 | DMPC15172629_Speleonectes_tulumensis_2 | ---NA---   | 100 |          |        | -                      | 0  |  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 479 | DMPC15172654_Speleonectes_tulumensis_2 | sifa preprohormone                                   | 131 | 1.27E-17 | 74.50% | -                      | 0  |  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 480 | DMPC15172754_Speleonectes_tulumensis_1 | ame: full=trypsin-1 ame: full=trypsin i              | 143 | 6.99E-31 | 72.40% | -                      | 0  |  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 481 | DMPC15172841_Speleonectes_tulumensis_0 | sjchg02838 protein                                   | 214 | 2.73E-42 | 59.30% | F:catalytic activity   | 1  |  | IPR001547; IPR013781; IPR017853   |
| 482 | DMPC15172931_Speleonectes_tulumensis_1 | sulfakinin-like peptide                              | 238 | 1.76E-16 | 62.50% | C:extracellular region | 1  |  | IPR013152; tmhmm (TMHMM)  |
| 483 | DMPC15172948_Speleonectes_tulumensis_1 | chitinase domain-containing protein 1                | 139 | 3.01E-34 | 59.70% | F:hydrolase activity   | 1  |  | IPR013781; IPR017853; PTHR11177 (PANTHER)   |

|     |  |   |     |          |        |   |   |  |
|-----|--|---|-----|----------|--------|---|---|--|
| 484 | DMPC15173039_Speleonectes_tulumensis_0 | nidogen and related basement membrane protein     | 284 | 3.90E-12 | 47.60% | -   | 0 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 485 | DMPC15173062_Speleonectes_tulumensis_1 | astakine variant 1                                | 212 | 9.17E-20 | 62.00% | -   | 0 | G3DSA:2.10.80.10 (GENE3D)  |
| 486 | DMPC15173080_Speleonectes_tulumensis_1 | carcinolectin 5b partial                          | 141 | 3.39E-38 | 67.90% | F:receptor binding; C:extracellular space; P:signal transduction  | 3 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)  |
| 487 | DMPC15173109_Speleonectes_tulumensis_2 | dimethylaniline monooxygenase                     | 289 | 7.50E-35 | 57.70% | P:oxidation-reduction process; F:oxidoreductase activity; F:N,N-dimethylaniline monooxygenase activity; F:monooxygenase activity; F:NADP binding; F:flavin adenine dinucleotide binding; F:nucleotide binding | 7 | IPR020946; G3DSA:3.50.50.60 (GENE3D), PTHR23023 (PANTHER), SSF51905 (SUPERFAMILY)  |
| 488 | DMPC15173121_Speleonectes_tulumensis_2 | trypsin   | 143 | 1.05E-51 | 72.00% | F:catalytic activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)   |
| 489 | DMPC15173162_Speleonectes_tulumensis_1 | pancreatic lipase-related protein 3-like          | 255 | 3.94E-45 | 51.00% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; F:triglyceride lipase activity; C:extracellular region; F:retinyl-palmitate esterase activity  | 6 | IPR000734; IPR001024; IPR002331; IPR008976; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 490 | DMPC15173169_Speleonectes_tulumensis_0 | vitelline membrane outer layer protein 1-like     | 179 | 3.28E-25 | 53.40% | -   | 0 | IPR005515; PTHR18841:SF0 (PANTHER)   |
| 491 | DMPC15173264_Speleonectes_tulumensis_1 | ---NA---  | 224 |          |        | -   | 0 | IPR000566; IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 492 | DMPC15173276_Speleonectes_tulumensis_2 | histone -like                                     | 145 | 3.56E-64 | 98.00% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4 | IPR000558; IPR007125; IPR009072  |
| 493 | DMPC15173346_Speleonectes_tulumensis_2 | trypsin 3   | 154 | 2.13E-58 | 78.00% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 494 | DMPC15173520_Speleonectes_tulumensis_0 | dermatopontin 2                                   | 105 | 1.62E-08 | 64.30% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 495 | DMPC15173527_Speleonectes_tulumensis_1 | trypsin-like serine proteinase 1                  | 158 | 1.49E-27 | 74.00% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 496 | DMPC15173564_Speleonectes_tulumensis_1 | trypsin-like serine proteinase 1                  | 111 | 1.21E-21 | 65.70% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)                               |
| 497 | DMPC15173573_Speleonectes_tulumensis_0 | hemocyanin subunit type 2                         | 134 | 9.04E-77 | 67.10% | -   | 0 | IPR005203; IPR013788; IPR014756  |
| 498 | DMPC15173661_Speleonectes_tulumensis_2 | plasminogen activator spa                         | 293 | 7.08E-59 | 57.80% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                   |
| 499 | DMPC15173662_Speleonectes_tulumensis_5 | ---NA---  | 159 |          |        | -   | 0 | IPR002172; PTHR24652 (PANTHER), tmhmm (TMHMM)  |
| 500 | DMPC15173673_Speleonectes_tulumensis_1 | cathepsin 1-like                                  | 230 | 5.37E-47 | 87.00% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                               |
| 501 | DMPC15173689_Speleonectes_tulumensis_0 | thioredoxin-dependent peroxide mitochondrial-like | 78  | 5.92E-13 | 78.40% | F:catalytic activity  | 1 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)  |
| 502 | DMPC15173699_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4          | 146 | 8.14E-15 | 57.50% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 503 | DMPC15173707_Speleonectes_tulumensis_2 | plasma kallikrein-like                            | 365 | 2.92E-48 | 55.80% | F:catalytic activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                   |

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|-----|--|--|-----|----------|--------|---|---|---|
| 504 | DMPC15173711_Speleonectes tulumensis_0 | pacifastin-related serine protease inhibitor precursor | 139 | 2.16E-09 | 53.14% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity   | 2 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 505 | DMPC15173721_Speleonectes tulumensis_1 | hemagglutinin amebocyte aggregation factor             | 157 | 6.40E-16 | 56.80% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 506 | DMPC15173811_Speleonectes tulumensis_0 | anti-lipoplysaccharide factor isoform 7                | 137 | 1.75E-27 | 67.80% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 507 | DMPC15173886_Speleonectes tulumensis_0 | dermatopontin 2  | 103 | 1.31E-08 | 61.86% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 508 | DMPC15174029_Speleonectes tulumensis_3 | ---NA---   | 147 |          |        | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 509 | DMPC15174081_Speleonectes tulumensis_2 | serine protease 56-like                                | 263 | 5.61E-10 | 54.50% | F:catalytic activity  | 1 | IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24261 (PANTHER), PTHR24261:SF9 (PANTHER)  |
| 510 | DMPC15174195_Speleonectes tulumensis_0 | secreted salivary gland                                | 364 | 4.91E-26 | 47.10% | -   | 0 | IPR004991; IPR023307; SignalP-NN(euk) (SIGNALP), SSF56973 (SUPERFAMILY)   |
| 511 | DMPC15174233_Speleonectes tulumensis_1 | soma ferritin  | 113 | 9.03E-28 | 88.90% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 512 | DMPC15174318_Speleonectes tulumensis_1 | ---NA---   | 143 |          |        | -   | 0 | IPR000566; IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 513 | DMPC15174320_Speleonectes tulumensis_2 | serine protease homolog 93 precursor                   | 110 | 8.20E-13 | 66.50% | F:hydrolase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)     |
| 514 | DMPC15174405_Speleonectes tulumensis_2 | tyrosine-protein kinase dnt                            | 70  | 5.84E-33 | 89.00% | F:protein kinase activity; F:receptor activity; P:cellular protein modification process; F:nucleotide binding   | 4 | IPR000719; IPR001245; IPR011009; G3DSA:1.10.510.10 (GENE3D), PTHR24416 (PANTHER), PTHR24416:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 515 | DMPC15174483_Speleonectes tulumensis_2 | torsin family protein                                  | 206 | 3.93E-25 | 67.50% | F:ATP binding; P:chaperone mediated protein folding requiring cofactor  | 2 | IPR009724; IPR010448; PTHR10760:SF2 (PANTHER), tmhmm (TMHMM)  |
| 516 | DMPC15174484_Speleonectes tulumensis_0 | serine protease  | 134 | 3.23E-20 | 68.20% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)               |
| 517 | DMPC15174512_Speleonectes tulumensis_2 | cre-nas-15 protein                                     | 273 | 9.52E-64 | 56.70% | F:metal ion binding; P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:zinc ion binding; F:peptidase activity; F:metalloendopeptidase activity    | 7 | IPR001506; IPR006026; IPR024079; PTHR10127 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)                                 |
| 518 | DMPC15174535_Speleonectes tulumensis_0 | neutral protease precursor                             | 149 | 5.58E-12 | 67.40% | F:peptidase activity  | 1 | SignalP-NN(euk) (SIGNALP)   |
| 519 | DMPC15174542_Speleonectes tulumensis_1 | kazal-type serine proteinase inhibitor 4               | 197 | 5.39E-25 | 56.70% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)            |
| 520 | DMPC15174656_Speleonectes tulumensis_0 | trypsinogen 2  | 165 | 3.16E-50 | 69.40% | -   | 0 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)   |
| 521 | DMPC15174677_Speleonectes tulumensis_1 | serine protease  | 99  | 1.89E-15 | 61.40% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP)                   |
| 522 | DMPC15174718_Speleonectes tulumensis_1 | alpha-amylase 1  | 189 | 2.76E-37 | 56.40% | P:carbohydrate metabolic process; F:cation binding; F:catalytic activity; F:hydrolase activity; P:metabolic process; F:hydrolase activity, acting on glycosyl bonds | 6 | IPR006048; IPR013780; IPR015902; PTHR10357:SF26 (PANTHER), SSF51011 (SUPERFAMILY)   |
| 523 | DMPC15174739_Speleonectes tulumensis_0 | trypsin partial  | 154 | 8.90E-12 | 63.40% | F:peptidase activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 524 | DMPC15174744_Speleonectes tulumensis_2 | PREDICTED: peroxiredoxin-4-like                        | 73  | 1.05E-15 | 93.00% | P:metabolic process; F:antioxidant activity; F:catalytic activity   | 3 | IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER)   |



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|-----|--|---|-----|-----------|--------|--|----|---|
| 525 | DMPC15174854_Speleonectes_tulumensis_2 | zinc finger protein draculin  | 67  | 1.26E-11  | 65.10% | F:nucleic acid binding; F:zinc ion binding; C:intracellular; P:biological process  | 4  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13894 (PFAM), SSF57667 (SUPERFAMILY)                                  |
| 526 | DMPC15174899_Speleonectes_tulumensis_2 | latrophilin 2-like  | 189 | 1.14E-13  | 59.70% | F:transmembrane signaling receptor activity; F:receptor activity; C:integral to membrane; F:G-protein coupled receptor activity; C:membrane; P:cell surface receptor signaling pathway; P:G-protein coupled receptor signaling pathway | 7  | IPR000832; PTHR12011 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 527 | DMPC15174987_Speleonectes_tulumensis_0 | lysosomal alphanmannosidase   | 170 | 1.15E-36  | 70.50% | P:carbohydrate metabolic process; F:binding; F:hydrolase activity  | 3  | IPR000602; IPR011330; IPR027291; PTHR11607 (PANTHER), PTHR11607:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP)                      |
| 528 | DMPC15175024_Speleonectes_tulumensis_2 | ame: full=annulin ame: full=protein-glutamine gamma-glutamyltransferase<br>ame: full=transglutaminase | 141 | 5.97E-37  | 69.90% | -  | 0  | IPR008958; IPR013783; IPR023608; PTHR11590:SF16 (PANTHER)   |
| 529 | DMPC15175062_Speleonectes_tulumensis_1 | vitellogenin 1  | 146 | 6.41E-17  | 51.80% | -  | 0  | IPR001846; PTHR11339 (PANTHER)  |
| 530 | DMPC15175068_Speleonectes_tulumensis_0 | aldehyde dehydrogenase mitochondrial-like   | 146 | 1.45E-61  | 87.30% | C:cytoplasm; F:catalytic activity; P:lipid metabolic process; P:secondary metabolic process; P:metabolic process   | 5  | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 531 | DMPC15175105_Speleonectes_tulumensis_2 | loc558601 protein   | 126 | 8.83E-29  | 79.70% | P:metabolic process; F:catalytic activity  | 2  | IPR006076; G3DSA:3.50.50.60 (GENE3D), PTHR10961 (PANTHER), PTHR10961:SF7 (PANTHER), SSF51905 (SUPERFAMILY)                    |
| 532 | DMPC15175179_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a-like   | 141 | 1.66E-51  | 90.10% | C:nucleoplasm; P:signal transduction; P:response to stress; P:DNA metabolic process; P:translation; F:binding; P:metabolic process; F:structural molecule activity; C:endosome; C:ribosome; C:cytosol                                  | 11 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 533 | DMPC15175303_Speleonectes_tulumensis_0 | selenium-dependent glutathione peroxidase   | 113 | 1.61E-33  | 78.40% | -  | 0  | IPR000889; IPR012336  |
| 534 | DMPC15175317_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor   | 130 | 3.50E-20  | 52.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP)   |
| 535 | DMPC15175323_Speleonectes_tulumensis_2 | soma ferritin   | 112 | 1.90E-32  | 88.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 536 | DMPC15175381_Speleonectes_tulumensis_1 | aminoacyl-trna synthetase auxiliary   | 198 | 9.60E-65  | 82.80% | F:catalytic activity; F:RNA binding  | 2  | IPR002547; IPR012340; PTHR11946 (PANTHER), PTHR11946:SF3 (PANTHER)  |
| 537 | DMPC15175587_Speleonectes_tulumensis_0 | ---NA---  | 139 |           |        | -  | 0  | IPR004911   |
| 538 | DMPC15175643_Speleonectes_tulumensis_2 | thioredoxin 1   | 134 | 1.32E-26  | 82.60% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process   | 5  | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)  |
| 539 | DMPC15175735_Speleonectes_tulumensis_2 | ame: full=hemagglutinin ameocyte aggregation factor ame: full=18k-laf flags: precursor                | 128 | 4.99E-09  | 55.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 540 | DMPC15175737_Speleonectes_tulumensis_0 | hemagglutinin ameocyte aggregation factor   | 118 | 1.40E-10  | 60.10% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 541 | DMPC15175782_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor   | 131 | 4.96E-21  | 53.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 542 | DMPC15175794_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor   | 174 | 1.26E-109 | 73.80% | -  | 0  | IPR005203; IPR013788; IPR014756   |
| 543 | DMPC15175831_Speleonectes_tulumensis_1 | elastase  | 164 | 1.40E-28  | 56.90% | F:hydrolase activity   | 1  | IPR013856; IPR023612; SSF55486 (SUPERFAMILY)  |

|     |  |   |     |           |        |  |   |  |
|-----|--|---|-----|-----------|--------|--|---|--|
| 544 | DMPC15175843_Speleonectes tulumensis_1 | trypsin-like serine proteinase 1  | 114 | 9.59E-12  | 52.70% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 545 | DMPC15175844_Speleonectes tulumensis_2 | glyceraldehyde-3-phosphate dehydrogenase  | 129 | 2.06E-09  | 84.63% | F:nucleotide binding; P:carbohydrate metabolic process; F:catalytic activity; P:metabolic process  | 4 | IPR020831  |
| 546 | DMPC15175944_Speleonectes tulumensis_1 | selenium-dependent glutathione peroxidase   | 131 | 2.25E-46  | 77.10% | -  | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 547 | DMPC15175960_Speleonectes tulumensis_1 | duf563 domain protein   | 135 | 1.55E-41  | 61.80% | F:transferase activity   | 1 | IPR007657; PTHR20961 (PANTHER), PTHR20961:SF0 (PANTHER)  |
| 548 | DMPC15176054_Speleonectes tulumensis_0 | aael015320- partial   | 175 | 3.57E-88  | 85.80% | F:protein kinase activity  | 1 | IPR001680; IPR015943; IPR017986; IPR019775; PTHR15653 (PANTHER), PTHR15653:SF0 (PANTHER)   |
| 549 | DMPC15176085_Speleonectes tulumensis_0 | 14-3-3 zeta   | 151 | 1.68E-90  | 94.60% | C:cytoplasm; F:protein binding   | 2 | IPR000308; IPR023409; IPR023410; PTHR18860:SF0 (PANTHER)   |
| 550 | DMPC15176139_Speleonectes tulumensis_0 | superoxide dismutase  | 289 | 1.95E-27  | 52.30% | F:metal ion binding; P:oxidation-reduction process; F:oxidoreductase activity; F:antioxidant activity; P:superoxide metabolic process; F:superoxide dismutase activity | 6 | IPR001424; IPR018152; IPR024134  |
| 551 | DMPC15176193_Speleonectes tulumensis_0 | hypothetical protein DAPPUDRAFT_332702  | 147 | 6.37E-14  | 58.17% | -  | 0 | IPR001747; IPR015816; IPR015819; PTHR13769 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 552 | DMPC15176214_Speleonectes tulumensis_2 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf flags: precursor | 116 | 9.82E-08  | 57.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 553 | DMPC15176330_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor  | 144 | 1.22E-30  | 68.10% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 554 | DMPC15176386_Speleonectes tulumensis_2 | si:dkey- protein  | 99  | 8.56E-09  | 68.89% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 555 | DMPC15176409_Speleonectes tulumensis_1 | hemocyanin subunit type 1 precursor   | 134 | 6.08E-65  | 76.90% | -  | 0 | IPR005203; IPR013788; IPR014756  |
| 556 | DMPC15176424_Speleonectes tulumensis_1 | mitochondrial manganese superoxide dismutase  | 222 | 3.69E-77  | 85.00% | -  | 0 | IPR001189; IPR019831; IPR019832; IPR019833; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER), tmhmm (TMHMM)                                    |
| 557 | DMPC15176425_Speleonectes tulumensis_2 | plasminogen activator spa   | 322 | 6.82E-69  | 57.70% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)               |
| 558 | DMPC15176426_Speleonectes tulumensis_2 | soma ferritin   | 121 | 6.82E-36  | 84.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 559 | DMPC15176430_Speleonectes tulumensis_0 | ferritin peptide  | 250 | 1.66E-37  | 88.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; IPR014034   |
| 560 | DMPC15176491_Speleonectes tulumensis_0 | ferritin 3 heavy chain protein copy c   | 146 | 1.75E-39  | 78.20% | F:binding  | 1 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 561 | DMPC15176494_Speleonectes tulumensis_1 | 60s ribosomal protein l40   | 148 | 4.06E-47  | 97.90% | C:ribosome; F:structural molecule activity; P:translation  | 3 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)      |
| 562 | DMPC15176527_Speleonectes tulumensis_2 | pvf3 cg34378-pd   | 204 | 2.77E-09  | 58.60% | F:growth factor activity; C:membrane   | 2 | IPR000072; G3DSA:2.10.90.10 (GENE3D), PTHR21719 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF57501 (SUPERFAMILY)                        |
| 563 | DMPC15176545_Speleonectes tulumensis_0 | pyrroline-5-carboxylate dehydrogenase   | 354 | 1.26E-129 | 82.50% | F:catalytic activity; C:mitochondrion; P:biosynthetic process; ; P:metabolic process   | 5 | IPR015590; IPR016160; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF52 (PANTHER)  |
| 564 | DMPC15176630_Speleonectes tulumensis_1 | chymotrypsin-like elastase family member 2a   | 144 | 3.66E-13  | 60.30% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), PTHR24275:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |

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|-----|--|---|-----|----------|--------|--|---|---|
| 565 | DMPC15176654_Speleonectes_tulumensis_0 | isoform cra_b   | 152 | 5.80E-45 | 96.60% | -  | 0 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)  |
| 566 | DMPC15176703_Speleonectes_tulumensis_0 | ---NA---  | 142 |          |        | -  | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER)  |
| 567 | DMPC15176747_Speleonectes_tulumensis_1 | cg7872 cg7872-pa  | 148 | 3.24E-49 | 81.00% | P:protein metabolic process; F:protein binding   | 2 | <a href="#">IPR001623</a> ; <a href="#">IPR018253</a> ; <a href="#">PTHR24078 (PANTHER)</a> , <a href="#">PTHR24078:SF4 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 568 | DMPC15176794_Speleonectes_tulumensis_1 | egf-like repeat and discoidin i-like domain-containing protein 3-like | 136 | 5.22E-16 | 63.80% | P:cell adhesion  | 1 | IPR000421; IPR008979; IPR027060; PTHR10127 (PANTHER)  |
| 569 | DMPC15176820_Speleonectes_tulumensis_2 | cathepsin 1   | 194 | 1.21E-45 | 87.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)   |
| 570 | DMPC15176869_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 2                              | 90  | 1.54E-12 | 57.80% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 571 | DMPC15176949_Speleonectes_tulumensis_1 | serine-type endopeptidase   | 78  | 5.42E-12 | 61.70% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24276 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 572 | DMPC15177022_Speleonectes_tulumensis_1 | fras1-related extracellular matrix protein 1-like                     | 146 | 2.56E-14 | 52.20% | -  | 0 | <a href="#">IPR001304</a> ; <a href="#">IPR016186</a> ; <a href="#">IPR016187</a> ; <a href="#">PTHR22802 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 573 | DMPC15177077_Speleonectes_tulumensis_0 | chitinase domain-containing protein 1                                 | 165 | 7.37E-14 | 61.20% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity; P:chitin catabolic process; F:chitinase activity | 6 | PTHR11177 (PANTHER)   |
| 574 | DMPC15177078_Speleonectes_tulumensis_0 | proclotting enzyme  | 236 | 4.15E-39 | 73.50% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)   |
| 575 | DMPC15177087_Speleonectes_tulumensis_1 | chitinase partial   | 198 | 2.56E-78 | 70.60% | -  | 0 | IPR001223; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)  |
| 576 | DMPC15177108_Speleonectes_tulumensis_2 | serine protease inhibitor kazal-type 6-like                           | 150 | 1.80E-07 | 67.75% | -  | 0 | <a href="#">IPR001239</a> ; <a href="#">IPR002350</a> ; <a href="#">G3DSA:3.30.60.30 (GENE3D)</a> , <a href="#">PTHR21312 (PANTHER)</a> , <a href="#">PTHR21312:SF8 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF100895 (SUPERFAMILY)</a> |
| 577 | DMPC15177133_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4                              | 117 | 1.50E-09 | 52.20% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 578 | DMPC15177191_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor                       | 130 | 1.12E-16 | 52.10% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                | 4 | <a href="#">IPR000716</a> ; <a href="#">IPR022339</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 579 | DMPC15177307_Speleonectes_tulumensis_1 | soma ferritin   | 111 | 6.88E-30 | 86.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 580 | DMPC15177395_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like                       | 118 | 1.24E-12 | 62.60% | -  | 0 | <a href="#">IPR026645</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 581 | DMPC15177435_Speleonectes_tulumensis_2 | lipase 3-like   | 268 | 1.51E-41 | 71.90% | F:hydrolase activity; P:lipid metabolic process  | 2 | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), SSF53474 (SUPERFAMILY)   |
| 582 | DMPC15177483_Speleonectes_tulumensis_0 | low quality protein: titin-like                                       | 225 | 3.31E-54 | 85.00% | -  | 0 | IPR003599; IPR007110; IPR013098; IPR013783; IPR020675; PTHR22964:SF3 (PANTHER), SSF48726 (SUPERFAMILY)  |
| 583 | DMPC15177513_Speleonectes_tulumensis_1 | epididymal secretory protein e1                                       | 146 | 7.79E-19 | 60.50% | -  | 0 | <a href="#">IPR003172</a> ; <a href="#">IPR014756</a> ; <a href="#">PTHR11306 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 584 | DMPC15177529_Speleonectes_tulumensis_1 | prophenoloxidase-activating enzyme 2                                  | 123 | 7.85E-08 | 64.78% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 585 | DMPC15177545_Speleonectes_tulumensis_1 | 14-3-3 protein  | 97  | 6.47E-24 | 76.30% | F:protein binding  | 1 | IPR000308; IPR023410; PTHR18860:SF0 (PANTHER)   |

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|-----|--|--|-----|----------|--------|--|---|---|
| 586 | DMPC15177768_Speleonectes_tulumensis_2 | sifa preprohormone                                   | 153 | 1.81E-17 | 74.50% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 587 | DMPC15177818_Speleonectes_tulumensis_1 | ---NA---   | 202 |          |        | -  | 0 | IPR000566; IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 588 | DMPC15177855_Speleonectes_tulumensis_1 | multicopper oxidase                                  | 143 | 1.08E-19 | 61.80% | P:oxidation-reduction process; F:oxidoreductase activity; F:copper ion binding; F:metal ion binding  | 4 | IPR008972; IPR011706; PTHR11709 (PANTHER), PTHR11709:SF8 (PANTHER)  |
| 589 | DMPC15177908_Speleonectes_tulumensis_0 | ---NA---   | 104 |          |        | -  | 0 | PTHR22897 (PANTHER)   |
| 590 | DMPC15177957_Speleonectes_tulumensis_0 | simila to cg9796                                     | 157 | 3.33E-21 | 62.90% | -  | 0 | IPR004911; SignalP-NN(euk) (SIGNALP)  |
| 591 | DMPC15178012_Speleonectes_tulumensis_0 | ---NA---   | 244 |          |        | -  | 0 | IPR008160; PTHR24023 (PANTHER)  |
| 592 | DMPC15178020_Speleonectes_tulumensis_0 | ---NA---   | 80  |          |        | -  | 0 | IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24252 (PANTHER)   |
| 593 | DMPC15178098_Speleonectes_tulumensis_2 | ---NA---   | 121 |          |        | -  | 0 | IPR001283; IPR014044  |
| 594 | DMPC15178135_Speleonectes_tulumensis_2 | aldo-keto partial                                    | 122 | 9.62E-24 | 74.50% | F:catalytic activity; P:multicellular organismal development   | 2 | IPR001395; IPR023210; PTHR11732:SF34 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 595 | DMPC15178312_Speleonectes_tulumensis_2 | PREDICTED: mucin-5B                                  | 403 | 5.91E-08 | 42.67% | -  | 0 | IPR001007; PTHR11339 (PANTHER), PTHR11339:SF42 (PANTHER), tmhmm (TMHMM), SSF57603 (SUPERFAMILY)   |
| 596 | DMPC15178316_Speleonectes_tulumensis_2 | hemocyte protein-glutamine gamma-glutamyltransferase | 290 | 3.70E-38 | 72.10% | F:metal ion binding; P:peptide cross-linking; F:protein-glutamine gamma-glutamyltransferase activity   | 3 | IPR008958; IPR013783; IPR023608; PTHR11590:SF17 (PANTHER)   |
| 597 | DMPC15178340_Speleonectes_tulumensis_2 | dysferlin-interacting protein 1                      | 163 | 3.54E-52 | 68.60% | P:negative regulation of phosphatase activity; F:phosphatase binding   | 2 | IPR002110; IPR020683; PTHR24179 (PANTHER), PTHR24179:SF2 (PANTHER)  |
| 598 | DMPC15178358_Speleonectes_tulumensis_1 | trypsinogen 2  | 380 | 4.30E-62 | 59.00% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)    |
| 599 | DMPC15178381_Speleonectes_tulumensis_1 | kallikrein-2 isoform 1                               | 117 | 1.39E-14 | 54.20% | P:proteolysis; P:extracellular matrix disassembly; F:serine-type endopeptidase activity; P:extracellular matrix organization; C:extracellular region | 5 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)                              |
| 600 | DMPC15178394_Speleonectes_tulumensis_5 | protein  | 435 | 1.21E-24 | 70.20% | -  | 0 | SignalP-NN(euk) (SIGNALP)   |
| 601 | DMPC15178467_Speleonectes_tulumensis_0 | cathepsin l-like                                     | 131 | 5.57E-59 | 80.80% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                                      |
| 602 | DMPC15178469_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor isoform 7             | 153 | 2.22E-16 | 61.90% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 603 | DMPC15178631_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor isoform 7             | 151 | 3.40E-30 | 66.90% | -  | 0 | IPR024509; IPR024716  |
| 604 | DMPC15178647_Speleonectes_tulumensis_2 | zinc finger protein 670                              | 129 | 2.14E-17 | 54.90% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PTHR11389:SF382 (PANTHER), PF12874 (PFAM), PF13465 (PFAM), SSF57667 (SUPERFAMILY) |
| 605 | DMPC15178648_Speleonectes_tulumensis_1 | neutral ceramidase                                   | 180 | 1.02E-52 | 62.30% | -  | 0 | IPR006823   |
| 606 | DMPC15178654_Speleonectes_tulumensis_1 | hypothetical protein YQE_03041, partial              | 183 | 1.14E-55 | 86.50% | -  | 0 | IPR004878; PTHR21522:SF20 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 607 | DMPC15178662_Speleonectes_tulumensis_1 | cathepsin l  | 154 | 7.70E-49 | 76.60% | F:peptidase activity   | 1 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                |

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|-----|--|---|-----|-----------|--------|---|---|---|
| 608 | DMPC15178672_Speleonectes_tulumensis_2 | serine protease                                 | 126 | 1.03E-13  | 67.30% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 609 | DMPC15178727_Speleonectes_tulumensis_2 | chitinase                                       | 126 | 4.33E-07  | 60.00% | -   | 0 | IPR001223; IPR013781; IPR017853; G3DSA:2.40.10.10 (GENE3D), PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 610 | DMPC15178741_Speleonectes_tulumensis_2 | serine protease inhibitor serpin-4              | 165 | 2.26E-21  | 52.40% | F:serine-type endopeptidase inhibitor activity; P:proteolysis; F:peptidase activity   | 3 | IPR000215; IPR023796; G3DSA:2.30.39.10 (GENE3D), G3DSA:3.30.497.10 (GENE3D)   |
| 611 | DMPC15178775_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7        | 132 | 5.30E-16  | 64.70% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 612 | DMPC15178827_Speleonectes_tulumensis_5 | ---NA---  | 51  |           |        | -   | 0 | IPR001881; G3DSA:2.10.25.10 (GENE3D), PTHR24040 (PANTHER), SSF57196 (SUPERFAMILY)   |
| 613 | DMPC15178833_Speleonectes_tulumensis_2 | clipd1 protein                                  | 151 | 9.66E-14  | 59.40% | F:hydrolase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)   |
| 614 | DMPC15178836_Speleonectes_tulumensis_2 | ---NA---  | 107 |           |        | -   | 0 | no IPS match  |
| 615 | DMPC15178844_Speleonectes_tulumensis_2 | trypsin   | 130 | 4.04E-25  | 61.10% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)  |
| 616 | DMPC15178966_Speleonectes_tulumensis_2 | wd40 repeat-containing protein smu1             | 283 | 3.47E-139 | 92.10% | C:nucleus; C:cytoplasm  | 2 | IPR001680; IPR015943; IPR017986; IPR019775; PTHR22848 (PANTHER)   |
| 617 | DMPC15179033_Speleonectes_tulumensis_2 | dbh-like monooxygenase protein 1 homolog        | 156 | 4.84E-12  | 65.20% | F:transferase activity; F:binding; F:catalytic activity; P:nucleobase-containing compound metabolic process   | 4 | IPR000945; IPR008977; IPR014784; PF03712 (PFAM)   |
| 618 | DMPC15179042_Speleonectes_tulumensis_0 | clotting factor b-like                          | 451 | 7.16E-45  | 64.60% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), tmhmm (TMHMM)   |
| 619 | DMPC15179092_Speleonectes_tulumensis_2 | histone h1                                      | 284 | 4.31E-33  | 87.40% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4 | IPR005818; IPR005819; IPR011991; PTHR11467 (PANTHER), PTHR11467:SF0 (PANTHER), SSF46785 (SUPERFAMILY)   |
| 620 | DMPC15179137_Speleonectes_tulumensis_0 | peroxiredoxin 1-like                            | 100 | 4.45E-20  | 61.40% | P:oxidation-reduction process; F:oxidoreductase activity; F:antioxidant activity; F:peroxiredoxin activity  | 4 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF45 (PANTHER)   |
| 621 | DMPC15179156_Speleonectes_tulumensis_1 | 3-oxoacyl-acyl-carrier-protein reductase-like   | 176 | 1.55E-64  | 82.60% | F:catalytic activity; P:metabolic process; F:nucleotide binding   | 3 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24322 (PANTHER), PTHR24322:SF0 (PANTHER), PF13561 (PFAM), SSF51735 (SUPERFAMILY)                    |
| 622 | DMPC15179209_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor                  | 137 | 1.27E-29  | 69.80% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 623 | DMPC15179211_Speleonectes_tulumensis_0 | ferritin h subunit                              | 94  | 5.14E-16  | 79.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; PTHR11431:SF14 (PANTHER)   |
| 624 | DMPC15179255_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 146 | 1.33E-21  | 51.60% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 625 | DMPC15179318_Speleonectes_tulumensis_1 | soma ferritin                                   | 114 | 1.32E-27  | 88.30% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 626 | DMPC15179374_Speleonectes_tulumensis_0 | serine protease                                 | 338 | 1.90E-28  | 56.80% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity; F:peptidase activity   | 4 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), tmhmm (TMHMM)   |

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|-----|--|--|-----|----------|--------|--|----|---|
| 627 | DMPC15179402_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a   | 150 | 1.08E-59 | 96.20% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 628 | DMPC15179423_Speleonectes_tulumensis_2 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf precursor | 138 | 8.13E-08 | 57.00% | -  | 0  | IPR026645   |
| 629 | DMPC15179428_Speleonectes_tulumensis_0 | ---NA---   | 301 |          |        | -  | 0  | IPR003961; IPR013783; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 630 | DMPC15179436_Speleonectes_tulumensis_0 | ---NA---   | 91  |          |        | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY)                 |
| 631 | DMPC15179574_Speleonectes_tulumensis_0 | ---NA---   | 75  |          |        | -  | 0  | IPR001424; IPR024134  |
| 632 | DMPC15179683_Speleonectes_tulumensis_3 | protein  | 132 | 8.58E-16 | 67.30% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding  | 4  | IPR016040; PTHR24322 (PANTHER), PTHR24322:SF57 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 633 | DMPC15179705_Speleonectes_tulumensis_1 | carcinolectin 5a isoform   | 155 | 1.10E-17 | 69.30% | F:receptor binding; C:extracellular space; P:signal transduction   | 3  | IPR002181; IPR014715; IPR020837; PTHR19143 (PANTHER)  |
| 634 | DMPC15179718_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7   | 136 | 6.90E-28 | 67.60% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 635 | DMPC15179722_Speleonectes_tulumensis_1 | thioredoxin 1  | 100 | 1.11E-20 | 79.30% | P:cell redox homeostasis; F:electron carrier activity; P:glycerol ether metabolic process; F:protein disulfide oxidoreductase activity   | 4  | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)  |
| 636 | DMPC15179750_Speleonectes_tulumensis_1 | matrix metalloproteinase-17  | 115 | 7.44E-21 | 70.60% | P:proteolysis; P:metabolic process; C:extracellular matrix; F:zinc ion binding; F:metalloendopeptidase activity  | 5  | IPR002477; PTHR10201 (PANTHER)  |
| 637 | DMPC15179764_Speleonectes_tulumensis_1 | clip-domain serine family d  | 129 | 2.46E-15 | 67.70% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 638 | DMPC15179777_Speleonectes_tulumensis_2 | dermatopontin 2  | 141 | 4.56E-20 | 61.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 639 | DMPC15179780_Speleonectes_tulumensis_1 | lipase 3-like  | 142 | 5.00E-39 | 70.10% | F:hydrolase activity; P:lipid metabolic process  | 2  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)              |
| 640 | DMPC15179782_Speleonectes_tulumensis_2 | platelet-activating factor acetylhydrolase-like                                  | 71  | 1.18E-09 | 55.70% | P:low-density lipoprotein particle remodeling; P:lipid catabolic process; P:plasma lipoprotein particle oxidation; P:lipid oxidation; F:calcium-independent phospholipase A2 activity; C:low-density lipoprotein particle; F:1-alkyl-2-acetylgllycerophosphocholine esterase activity; F:phospholipid binding; P:positive regulation of monocyte chemotaxis; C:extracellular space   | 10 | IPR005065   |

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|-----|--|---|-----|----------|--------|---|---|---|
| 641 | DMPC15179801_Speleonectes_tulumensis_0 | ---NA---  | 107 | -        |        |   | 0 | IPR000562; IPR001254; IPR009003; IPR013806; G3DSA:2.40.10.10 (GENE3D), PTHR22918 (PANTHER), PTHR22918:SF0 (PANTHER)                                   |
| 642 | DMPC15179899_Speleonectes_tulumensis_0 | thioredoxin peroxidase                          | 148 | 5.88E-39 | 89.20% | -   | 0 | IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)   |
| 643 | DMPC15179972_Speleonectes_tulumensis_2 | galactose-specific c-type                       | 349 | 9.14E-19 | 54.30% | F:protein binding   | 1 | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 644 | DMPC15179980_Speleonectes_tulumensis_0 | plasminogen activator spa                       | 103 | 2.32E-20 | 63.30% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 645 | DMPC15179994_Speleonectes_tulumensis_1 | ras-responsive element-binding protein 1        | 158 | 4.52E-19 | 63.10% | F:nucleic acid binding; F:zinc ion binding; C:nucleus; C:intracellular  | 4 | IPR007087; IPR013087; IPR015880; PTHR24403 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 646 | DMPC15180008_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 130 | 4.48E-11 | 58.60% | P:proteolysis; F:peptidase activity   | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 647 | DMPC15180065_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4        | 119 | 7.90E-14 | 56.70% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 648 | DMPC15180086_Speleonectes_tulumensis_1 | ---NA---  | 123 | -        |        |   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 649 | DMPC15180122_Speleonectes_tulumensis_2 | cyclophilin ovcyp-2                             | 135 | 2.71E-34 | 85.00% | P:protein metabolic process; P:biological_process; C:plasma membrane; F:protein binding; C:plastid; P:cellular protein modification process; C:extracellular region; F:catalytic activity                   | 8 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), tmhmm (TMHMM)   |
| 650 | DMPC15180126_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4        | 126 | 9.83E-11 | 74.00% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 651 | DMPC15180129_Speleonectes_tulumensis_2 | hemocyanin subunit 2 precursor                  | 141 | 4.45E-14 | 70.00% | -   | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 652 | DMPC15180158_Speleonectes_tulumensis_1 | ribosome biogenesis protein bop1 homolog        | 221 | 1.35E-99 | 79.40% | C:nucleolus; C:nucleoplasm; P:regulation of biological process; P:cell cycle; F:binding; P:nucleobase-containing compound metabolic process; P:cell differentiation; P:multicellular organismal development | 8 | IPR001680; IPR015943; IPR017986; PTHR17605 (PANTHER)  |
| 653 | DMPC15180165_Speleonectes_tulumensis_2 | transmembrane protease serine 2                 | 109 | 4.22E-18 | 71.60% | F:hydrolase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                             |
| 654 | DMPC15180173_Speleonectes_tulumensis_2 | hemocyanin subunit type 2 precursor             | 121 | 3.91E-41 | 71.30% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 655 | DMPC15180243_Speleonectes_tulumensis_0 | anti-lipopolsaccharide factor isoform 7         | 128 | 1.34E-10 | 72.60% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 656 | DMPC15180273_Speleonectes_tulumensis_1 | fertilization envelope outer layer protein      | 145 | 3.40E-15 | 54.10% | -   | 0 | IPR005515; PTHR18841:SF0 (PANTHER)  |
| 657 | DMPC15180312_Speleonectes_tulumensis_1 | trypsin   | 165 | 2.57E-25 | 62.50% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)  |
| 658 | DMPC15180331_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor | 140 | 1.42E-18 | 52.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 659 | DMPC15180360_Speleonectes_tulumensis_2 | GF16338   | 231 | 3.95E-60 | 65.70% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding   | 4 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24322 (PANTHER), PTHR24322:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY)           |

|     |  |   |     |           |         |  |    |  |
|-----|--|---|-----|-----------|---------|--|----|--|
| 660 | DMPC15180428_Speleonectes_tulumensis_0 | predicted protein                               | 159 | 2.25E-07  | 50.00%  | -  | 0  | no IPS match   |
| 661 | DMPC15180464_Speleonectes_tulumensis_1 | dermatopontin 2                                 | 138 | 8.68E-13  | 61.00%  | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 662 | DMPC15180501_Speleonectes_tulumensis_2 | peptidylprolyl isomerase a                      | 158 | 4.31E-43  | 71.60%  | P:protein metabolic process; F:catalytic activity  | 2  | IPR002130; IPR020892; IPR024936; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)   |
| 663 | DMPC15180524_Speleonectes_tulumensis_0 | nepriylsin isoform b                            | 113 | 1.28E-25  | 66.10%  | F:peptidase activity; C:extracellular space; P:protein metabolic process; P:catabolic process; C:cell  | 5  | IPR000718; IPR018497; IPR024079; PTHR11733:SF26 (PANTHER), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)                             |
| 664 | DMPC15180582_Speleonectes_tulumensis_2 | plasminogen activator spa                       | 120 | 1.12E-17  | 67.40%  | P:metabolic process; F:catalytic activity  | 2  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)                   |
| 665 | DMPC15180671_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like | 114 | 1.88E-09  | 61.30%  | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 666 | DMPC15180685_Speleonectes_tulumensis_1 | si:dkey- protein                                | 140 | 3.40E-22  | 61.90%  | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 667 | DMPC15180734_Speleonectes_tulumensis_0 | 60s ribosomal protein l40                       | 131 | 1.18E-47  | 98.50%  | C:ribosome; F:structural molecule activity; P:translation  | 3  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)           |
| 668 | DMPC15180835_Speleonectes_tulumensis_2 | soma ferritin                                   | 111 | 1.69E-30  | 86.30%  | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 669 | DMPC15180855_Speleonectes_tulumensis_1 | multiple inositol polyphosphate phosphatase 1   | 315 | 6.65E-72  | 61.80%  | F:hydrolase activity   | 1  | IPR000560; G3DSA:3.40.50.1240 (GENE3D), PTHR20963 (PANTHER), PTHR20963:SF8 (PANTHER), SSF53254 (SUPERFAMILY)                 |
| 670 | DMPC15181005_Speleonectes_tulumensis_1 | ubiquitin c                                     | 166 | 4.63E-113 | 100.00% | P:cell cycle; P:signal transduction; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; C:mitochondrion; ; C:endosome; P:cellular component organization; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:transport | 23 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)           |
| 671 | DMPC15181030_Speleonectes_tulumensis_1 | ---NA---  | 127 |           |         | -  | 0  | IPR002413; IPR014044   |
| 672 | DMPC15181058_Speleonectes_tulumensis_2 | carboxypeptidase a                              | 121 | 9.14E-24  | 66.60%  | F:hydrolase activity   | 1  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY) |
| 673 | DMPC15181204_Speleonectes_tulumensis_0 | chh xo- variant 4                               | 173 | 3.67E-27  | 70.10%  | F:neuropeptide hormone activity; C:extracellular region  | 2  | IPR000346; IPR001166   |
| 674 | DMPC15181210_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate dehydrogenase        | 142 | 3.83E-27  | 60.40%  | P:oxidation-reduction process; P:glucose metabolic process; F:oxidoreductase activity; F:oxidoreductase activity, acting on the aldehyde or oxo group of donors, NAD or NADP as acceptor; F:nucleotide binding; F:glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity; F:NAD binding; F:NADP binding  | 8  | IPR016040; IPR020828; IPR020831; SSF51735 (SUPERFAMILY)  |



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|-----|--|---|-----|----------|--------|--|---|--|
| 675 | DMPC15181244_Speleonectes tulumensis_1 | dermatopontin 3                                 | 94  | 3.80E-08 | 61.17% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 676 | DMPC15181357_Speleonectes tulumensis_4 | purple acid                                     | 132 | 9.16E-39 | 74.00% | F:binding; F:hydrolase activity  | 2 | G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER)  |
| 677 | DMPC15181553_Speleonectes tulumensis_1 | oocyte protease inhibitor-1 precursor           | 139 | 3.63E-11 | 58.20% | P:proteolysis; F:peptidase activity; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 6 | IPR000716; PTHR12352 (PANTHER)   |
| 678 | DMPC15181586_Speleonectes tulumensis_2 | trypsin   | 138 | 2.56E-25 | 62.60% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 679 | DMPC15181659_Speleonectes tulumensis_2 | trypsin partial                                 | 110 | 1.61E-10 | 54.20% | F:catalytic activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 680 | DMPC15181665_Speleonectes tulumensis_2 | pacifastin light chain                          | 366 | 1.13E-15 | 51.60% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity  | 2 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 681 | DMPC15181725_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor-like | 148 | 2.91E-14 | 61.50% | -  | 0 | IPR026645  |
| 682 | DMPC15181762_Speleonectes tulumensis_2 | hyaluronidase precursor                         | 161 | 1.04E-27 | 61.40% | P:defense response; P:carbohydrate metabolic process; F:hyaluronoglucosaminidase activity; F:catalytic activity  | 4 | IPR013785; IPR017853; IPR018155; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 683 | DMPC15181777_Speleonectes tulumensis_0 | hypothetical protein DAPPUDRAFT_308200          | 146 | 2.92E-09 | 50.00% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 684 | DMPC15181792_Speleonectes tulumensis_2 | lipase 3  | 124 | 3.41E-34 | 66.20% | P:lipid metabolic process; F:hydrolase activity, acting on ester bonds; F:hydrolase activity; P:lipid catabolic process  | 4 | IPR000073; G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)                  |
| 685 | DMPC15181862_Speleonectes tulumensis_2 | testicular serine protease 3                    | 121 | 4.60E-11 | 63.80% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                    |
| 686 | DMPC15181868_Speleonectes tulumensis_2 | saxiphilin precursor                            | 127 | 1.59E-10 | 63.00% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 687 | DMPC15181880_Speleonectes tulumensis_0 | hatching enzyme                                 | 130 | 6.82E-30 | 61.80% | F:hydrolase activity   | 1 | IPR001506; IPR006026; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)   |
| 688 | DMPC15181945_Speleonectes tulumensis_0 | soma ferritin                                   | 119 | 1.39E-32 | 90.10% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 689 | DMPC15181983_Speleonectes tulumensis_0 | GJ13839   | 498 | 7.36E-27 | 46.10% | F:chitin binding; P:chitin metabolic process; P:cell adhesion; C:extracellular region; F:receptor binding; P:signal transduction   | 6 | IPR001846; IPR002919; IPR014853; G3DSA:2.10.25.10 (GENE3D), PTHR11339 (PANTHER), PTHR11339:SF26 (PANTHER)                                    |
| 690 | DMPC15182132_Speleonectes tulumensis_1 | ---NA---  | 132 |          |        | -  | 0 | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 691 | DMPC15182179_Speleonectes tulumensis_0 | membrane metallo-endopeptidase-like 1-like      | 176 | 6.66E-61 | 81.30% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000718; IPR018497; IPR024079; PTHR11733:SF48 (PANTHER), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)   |
| 692 | DMPC15182383_Speleonectes tulumensis_1 | hypothetical protein DAPPUDRAFT_332702          | 239 | 2.68E-56 | 55.30% | P:lipid transport; F:lipid transporter activity  | 2 | IPR001747; IPR011030; PTHR23345 (PANTHER)  |
| 693 | DMPC15182392_Speleonectes tulumensis_2 | cathepsin I-like                                | 174 | 2.45E-22 | 87.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                |
| 694 | DMPC15182417_Speleonectes tulumensis_0 | isoform a                                       | 187 | 2.87E-12 | 44.30% | P:proteolysis; P:cell proliferation; F:metalloendopeptidase activity; C:cellular component   | 4 | IPR006586; IPR024079; SSF55486 (SUPERFAMILY)   |
| 695 | DMPC15182504_Speleonectes tulumensis_1 | anti-lipopolsaccharide factor isoform 7         | 154 | 1.59E-29 | 67.40% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |

|     |  |   |     |          |        |   |   |   |
|-----|--|---|-----|----------|--------|---|---|---|
| 696 | DMPC15182585_Speleonectes_tulumensis_1 | epididymal secretory protein e1         | 126 | 4.81E-15 | 59.50% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 697 | DMPC15182634_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor          | 144 | 1.02E-29 | 67.60% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 698 | DMPC15182678_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor          | 131 | 1.67E-27 | 67.20% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 699 | DMPC15182725_Speleonectes_tulumensis_0 | zinc finger protein 836                 | 99  | 9.95E-25 | 61.90% | P:regulation of transcription, DNA-dependent; P:transcription, DNA-dependent; F:zinc ion binding; C:nucleus; F:DNA binding  | 5 | IPR007087; IPR013087; IPR015880; PTHR24377 (PANTHER), PTHR24377:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)   |
| 700 | DMPC15182735_Speleonectes_tulumensis_0 | oocyte zinc finger protein 20           | 79  | 2.21E-12 | 62.10% | F:nucleic acid binding; F:zinc ion binding; C:nucleus; C:intracellular  | 4 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PTHR11389:SF381 (PANTHER), PF13465 (PFAM), PF13912 (PFAM), SSF57667 (SUPERFAMILY)                             |
| 701 | DMPC15182831_Speleonectes_tulumensis_2 | ---NA---                                | 163 |          |        | -   | 0 | IPR004169; SSF57059 (SUPERFAMILY)   |
| 702 | DMPC15182852_Speleonectes_tulumensis_1 | isoform a                               | 273 | 1.31E-17 | 43.80% | P:cell adhesion; F:chitin binding; P:chitin metabolic process; C:extracellular region   | 4 | IPR001007; IPR006207; PTHR11339 (PANTHER), PTHR11339:SF42 (PANTHER), SSF57603 (SUPERFAMILY)   |
| 703 | DMPC15182853_Speleonectes_tulumensis_2 | amine oxidase                           | 228 | 1.44E-23 | 58.70% | -   | 0 | IPR002937; IPR011032; PR00419 (PRINTS), G3DSA:3.50.50.60 (GENE3D), PTHR10742 (PANTHER), PTHR10742:SF22 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51905 (SUPERFAMILY) |
| 704 | DMPC15182855_Speleonectes_tulumensis_2 | beta-galactosidase bga35a               | 306 | 1.27E-25 | 61.70% | F:hydrolase activity  | 1 | IPR001944; IPR008979; PTHR23421:SF14 (PANTHER)  |
| 705 | DMPC15182859_Speleonectes_tulumensis_2 | epididymal secretory protein e1         | 137 | 2.12E-20 | 58.10% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 706 | DMPC15182897_Speleonectes_tulumensis_2 | female neotenic-specific protein 3      | 143 | 9.96E-13 | 55.00% | -   | 0 | tmhmm (TMHMM)   |
| 707 | DMPC15182935_Speleonectes_tulumensis_1 | mhc class ii-associated invariant chain | 118 | 1.79E-07 | 66.67% | P:multicellular organismal development  | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 708 | DMPC15183026_Speleonectes_tulumensis_0 | tfpia protein                           | 199 | 2.49E-10 | 62.30% | F:serine-type endopeptidase inhibitor activity; F:peptidase inhibitor activity; P:negative regulation of endopeptidase activity; P:blood coagulation; C:extracellular region; P:negative regulation of peptidase activity | 6 | IPR002223; IPR020901; PTHR10083 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 709 | DMPC15183058_Speleonectes_tulumensis_1 | phosphoglycerate kinase                 | 102 | 9.65E-40 | 81.10% | C:cytoplasm; F:kinase activity; P:metabolic process; F:nucleotide binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process  | 7 | IPR001576; IPR015824; IPR015901   |
| 710 | DMPC15183094_Speleonectes_tulumensis_0 | zinc finger protein                     | 79  | 2.12E-10 | 65.70% | C:intracellular; F:binding  | 2 | IPR007087; IPR013087; IPR015880; PTHR24387 (PANTHER), SSF57667 (SUPERFAMILY)  |

|     |  |   |     |          |        |  |    |   |
|-----|--|---|-----|----------|--------|--|----|---|
| 711 | DMPC15183168_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a  | 146 | 5.38E-52 | 97.00% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)           |
| 712 | DMPC15183212_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7  | 135 | 4.28E-26 | 67.50% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 713 | DMPC15183323_Speleonectes_tulumensis_0 | isoform a   | 127 | 1.29E-16 | 76.20% | F:hydrolase activity   | 1  | IPR025733; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER)  |
| 714 | DMPC15183344_Speleonectes_tulumensis_0 | ---NA---  | 144 |          |        | -  | 0  | IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                            |
| 715 | DMPC15183350_Speleonectes_tulumensis_0 | saxiphilin precursor  | 111 | 9.28E-11 | 65.10% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 716 | DMPC15183355_Speleonectes_tulumensis_1 | isoamyl acetate-hydrolyzing esterase 1 homolog  | 126 | 6.31E-25 | 76.30% | F:hydrolase activity   | 1  | IPR001087; IPR013831; PTHR14209 (PANTHER), SSF52266 (SUPERFAMILY)   |
| 717 | DMPC15183389_Speleonectes_tulumensis_2 | cathepsin 1   | 194 | 5.78E-31 | 85.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 718 | DMPC15183401_Speleonectes_tulumensis_1 | epididymal secretory protein e1   | 145 | 4.13E-16 | 58.80% | -  | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 719 | DMPC15183410_Speleonectes_tulumensis_2 | ubiquitin c   | 172 | 2.74E-68 | 99.60% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:cellular protein modification process; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport   | 27 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                      |
| 720 | DMPC15183487_Speleonectes_tulumensis_2 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf flags: precursor | 107 | 2.85E-07 | 58.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 721 | DMPC15183490_Speleonectes_tulumensis_0 | plasminogen activator spa   | 121 | 2.48E-17 | 69.30% | F:hydrolase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24252 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)               |
| 722 | DMPC15183553_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor  | 151 | 6.89E-30 | 67.70% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|     |  |   |     |           |        |  |   |   |
|-----|--|---|-----|-----------|--------|--|---|---|
| 723 | DMPC15183558_Speleonectes tulumensis_0 | stereocilin   | 229 | 1.67E-15  | 50.00% | -  | 0 | IPR026061; IPR026664  |
| 724 | DMPC15183577_Speleonectes tulumensis_1 | hemagglutinin amebocyte aggregation factor                    | 106 | 5.68E-22  | 65.20% | -  | 0 | IPR026645   |
| 725 | DMPC15183616_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor                                | 222 | 1.09E-33  | 73.60% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 726 | DMPC15183652_Speleonectes tulumensis_1 | hemocyanin subunit type 2 precursor                           | 170 | 1.63E-108 | 74.60% | -  | 0 | IPR000896; IPR002227; IPR005203; IPR008922; IPR013788; IPR014756; PTHR11511:SF4 (PANTHER)   |
| 727 | DMPC15183694_Speleonectes tulumensis_2 | female neotenic-specific protein 3                            | 136 | 5.66E-10  | 57.00% | -  | 0 | no IPS match  |
| 728 | DMPC15183791_Speleonectes tulumensis_1 | kazal-type serine proteinase inhibitor 4                      | 111 | 2.98E-11  | 66.00% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 729 | DMPC15183820_Speleonectes tulumensis_0 | hypothetical protein CAPTEDRAFT_177616                        | 131 | 5.28E-07  | 69.00% | -  | 0 | IPR005065   |
| 730 | DMPC15183878_Speleonectes tulumensis_0 | cell adhesion   | 103 | 1.23E-09  | 92.83% | F:calcium ion binding  | 1 | PTHR10913 (PANTHER), PTHR10913:SF18 (PANTHER)   |
| 731 | DMPC15183940_Speleonectes tulumensis_1 | peroxiredoxin 1 isoform 1                                     | 114 | 1.36E-12  | 55.50% | -  | 0 | PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER)   |
| 732 | DMPC15184040_Speleonectes tulumensis_0 | ankyrin repeat domain-containing                              | 124 | 9.16E-33  | 91.70% | F:hydrolase activity   | 1 | IPR002110; IPR020683; PTHR24123 (PANTHER), PTHR24123:SF0 (PANTHER), tmhmm (TMHMM)   |
| 733 | DMPC15184045_Speleonectes tulumensis_2 | proclotting enzyme  | 115 | 2.82E-25  | 78.20% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)                                  |
| 734 | DMPC15184210_Speleonectes tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor               | 148 | 6.49E-15  | 49.40% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:proteolysis; F:peptidase activity                                 | 6 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 735 | DMPC15184317_Speleonectes tulumensis_2 | nidogen 1   | 92  | 5.03E-11  | 64.60% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 736 | DMPC15184372_Speleonectes tulumensis_2 | multiple epidermal growth factor-like domains protein 10-like | 106 | 4.19E-32  | 66.50% | -  | 0 | IPR000742; IPR002049; IPR013032; PR00011 (PRINTS), G3DSA:2.170.300.10 (GENE3D), PTHR24035 (PANTHER), PTHR24035:SF3 (PANTHER), SSF57196 (SUPERFAMILY)  |
| 737 | DMPC15184411_Speleonectes tulumensis_2 | ame: full=conoporin-cn1 flags: precursor                      | 132 | 1.01E-09  | 56.00% | -  | 0 | IPR015926   |
| 738 | DMPC15184494_Speleonectes tulumensis_2 | ---NA---  | 155 |           |        | -  | 0 | no IPS match  |
| 739 | DMPC15184523_Speleonectes tulumensis_2 | GJ10839   | 190 | 3.76E-23  | 74.70% | P:metabolic process; F:catalytic activity  | 2 | IPR002198; IPR016040; PTHR24320 (PANTHER), PTHR24320:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF51735 (SUPERFAMILY)                  |
| 740 | DMPC15184550_Speleonectes tulumensis_0 | zinc finger protein 187                                       | 157 | 4.28E-15  | 58.70% | P:regulation of transcription, DNA-dependent; F:nucleic acid binding; P:transcription, DNA-dependent; P:viral reproduction; F:zinc ion binding; C:nucleus; F:sequence-specific DNA binding transcription factor activity | 7 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                                 |
| 741 | DMPC15184584_Speleonectes tulumensis_1 | anti-lipopolysaccharide factor                                | 137 | 1.24E-27  | 66.90% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 742 | DMPC15184598_Speleonectes tulumensis_1 | der p 3 allergen  | 121 | 8.36E-10  | 52.20% | P:proteolysis; F:serine-type endopeptidase activity; F:serine-type peptidase activity; F:hydrolase activity; F:catalytic activity; F:peptidase activity  | 6 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)   |

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|-----|--|--|-----|----------|--------|--|----|--|
| 743 | DMPC15184635_Speleonectes tulumensis_1 | trypsin 4  | 145 | 2.58E-16 | 61.70% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)   |
| 744 | DMPC15184665_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor                   | 135 | 3.38E-13 | 62.10% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 745 | DMPC15184675_Speleonectes tulumensis_2 | lipase 3-like  | 125 | 5.04E-18 | 73.50% | F:hydrolase activity; P:lipid metabolic process  | 2  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER)  |
| 746 | DMPC15184682_Speleonectes tulumensis_1 | cathepsin 1-like   | 157 | 1.55E-12 | 90.30% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 747 | DMPC15184691_Speleonectes tulumensis_1 | soma ferritin  | 119 | 1.06E-34 | 86.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 748 | DMPC15184708_Speleonectes tulumensis_1 | multiple epidermal growth factor-like domains protein 8-like | 78  | 4.32E-24 | 72.20% | C:cell   | 1  | IPR002165; PTHR10574 (PANTHER), PTHR10574:SF11 (PANTHER)   |
| 749 | DMPC15184749_Speleonectes tulumensis_1 | isoform c  | 131 | 1.95E-51 | 90.80% | P:cellular homeostasis; P:regulation of biological process; F:catalytic activity   | 3  | IPR012336; IPR013766; PTHR18929 (PANTHER), tmhmm (TMHMM)   |
| 750 | DMPC15184813_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor                   | 128 | 2.49E-10 | 55.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 751 | DMPC15184864_Speleonectes tulumensis_2 | ---NA---   | 138 |          |        | -  | 0  | IPR008197; PTHR19441 (PANTHER)   |
| 752 | DMPC15184913_Speleonectes tulumensis_0 | ubiquitin-60s ribosomal protein 140-like                     | 112 | 3.82E-37 | 95.20% | F:peptidase activity; P:cell cycle; F:protein binding; P:cellular protein modification process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; F:catalytic activity; P:protein transport; ; C:endosome; F:nucleotide binding; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport P:peptidase inhibitor activity; P:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 30 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 753 | DMPC15184925_Speleonectes tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor              | 130 | 1.35E-20 | 52.90% |  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 754 | DMPC15185027_Speleonectes tulumensis_0 | ves g 5 allergen   | 375 | 2.96E-41 | 53.20% | C:extracellular region   | 1  | IPR001283; IPR002413; IPR014044; IPR018244; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                               |
| 755 | DMPC15185077_Speleonectes tulumensis_2 | hemagglutinin amebocyte aggregation factor-like              | 119 | 5.21E-26 | 64.70% | -  | 0  | IPR026645  |
| 756 | DMPC15185080_Speleonectes tulumensis_1 | vitellogenin fused with superoxide dismutase                 | 809 | 4.01E-42 | 43.60% | P:lipid transport; F:lipid transporter activity  | 2  | IPR001846; IPR015255; IPR015818; IPR015819   |
| 757 | DMPC15185083_Speleonectes tulumensis_2 | peptidase thermolysin  | 154 | 3.97E-07 | 64.00% | P:proteolysis; F:hydrolase activity; F:metalloendopeptidase activity   | 3  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 758 | DMPC15185099_Speleonectes tulumensis_2 | hemocyanin subunit type 2 precursor                          | 152 | 1.83E-17 | 81.67% | -  | 0  | IPR005203; IPR013788; IPR014756; tmhmm (TMHMM)   |
| 759 | DMPC15185230_Speleonectes tulumensis_0 | thioredoxin- isoform a                                       | 129 | 2.73E-21 | 83.70% | P:response to stress; F:electron carrier activity; P:cellular homeostasis; P:regulation of biological process; P:metabolic process; P:multicellular organismal development; C:nucleus; F:catalytic activity  | 8  | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)   |

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|-----|--|---|-----|----------|--------|---|---|--|
| 760 | DMPC15185245_Speleonectes_tulumensis_0 | serine protease precursor                         | 152 | 1.25E-17 | 59.40% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding   | 4 | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 761 | DMPC15185259_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor                    | 145 | 1.33E-28 | 67.40% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 762 | DMPC15185326_Speleonectes_tulumensis_1 | trypsin 2   | 175 | 5.12E-27 | 78.90% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 763 | DMPC15185358_Speleonectes_tulumensis_0 | glutathione peroxidase 7-like                     | 137 | 1.65E-27 | 68.70% | F:catalytic activity  | 1 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER), tmhmm (TMHMM)   |
| 764 | DMPC15185383_Speleonectes_tulumensis_0 | neuropeptide precursor protein                    | 234 | 7.93E-17 | 75.40% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 765 | DMPC15185390_Speleonectes_tulumensis_0 | astakine variant 1                                | 118 | 6.00E-08 | 72.25% | -   | 0 | G3DSA:2.10.80.10 (GENE3D)  |
| 766 | DMPC15185474_Speleonectes_tulumensis_0 | triglyceride lipase                               | 281 | 9.25E-45 | 51.60% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; F:triglyceride lipase activity; C:extracellular region; P:lipid catabolic process; F:retinyl-palmitate esterase activity | 7 | IPR000734; IPR001024; IPR002331; IPR008976; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 767 | DMPC15185483_Speleonectes_tulumensis_1 | epididymal secretory protein e1                   | 136 | 1.26E-15 | 61.60% | P:transport   | 1 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 768 | DMPC15185529_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor        | 140 | 1.21E-14 | 59.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 769 | DMPC15185620_Speleonectes_tulumensis_2 | ferritin h subunit                                | 87  | 4.36E-19 | 96.80% | P:cellular homeostasis; F:binding; P:regulation of biological process; P:cell proliferation; F:catalytic activity; P:ion transport; C:mitochondrion; P:metabolic process                        | 8 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 770 | DMPC15185677_Speleonectes_tulumensis_1 | lipase 3  | 138 | 2.57E-21 | 66.20% | P:lipid metabolic process; F:hydrolase activity, acting on ester bonds; F:hydrolase activity; P:lipid catabolic process   | 4 | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER)  |
| 771 | DMPC15185831_Speleonectes_tulumensis_0 | female neotenic-specific protein 3                | 129 | 5.73E-10 | 58.75% | -   | 0 | no IPS match   |
| 772 | DMPC15185840_Speleonectes_tulumensis_1 | soma ferritin                                     | 107 | 5.67E-23 | 86.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 773 | DMPC15185865_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like   | 111 | 5.59E-13 | 64.20% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 774 | DMPC15185887_Speleonectes_tulumensis_0 | dehydrogenase reductase sdr family member 11-like | 111 | 6.99E-37 | 72.20% | -   | 0 | IPR002198; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 775 | DMPC15185900_Speleonectes_tulumensis_1 | epididymal secretory protein e1                   | 142 | 5.66E-19 | 60.50% | -   | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 776 | DMPC15185995_Speleonectes_tulumensis_0 | epididymal secretory protein e1 isoform 1         | 147 | 2.07E-23 | 56.20% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 777 | DMPC15186050_Speleonectes_tulumensis_2 | zinc finger protein 271-like                      | 134 | 2.72E-31 | 63.70% | -   | 0 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                                  |
| 778 | DMPC15186163_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_308544            | 113 | 5.64E-07 | 72.00% | -   | 0 | IPR004911  |
| 779 | DMPC15186166_Speleonectes_tulumensis_2 | zinc finger protein 25                            | 130 | 1.29E-25 | 60.80% | F:nucleic acid binding; F:zinc ion binding; C:intracellular; P:biological process   | 4 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)   |
| 780 | DMPC15186255_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4          | 130 | 3.49E-17 | 57.90% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |

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|-----|--|--|-----|----------|--------|--|----|--|
| 781 | DMPC15186271_Speleonectes_tulumensis_2 | glycosyl-phosphatidylinositol-linked carbonic anhydrase          | 314 | 1.43E-86 | 60.50% | -  | 0  | IPR001148; IPR018338; IPR023561; SignalP-NN(euk) (SIGNALP)   |
| 782 | DMPC15186299_Speleonectes_tulumensis_0 | superoxide dismutase   | 127 | 1.45E-22 | 82.50% | P:regulation of biological process; P:cell death; P:biological_process; ; P:cellular component organization; C:mitochondrion; P:response to stress; F:binding; P:multicellular organismal development; P:metabolic process; P:cell differentiation; F:catalytic activity; P:cell proliferation; P:mitochondrion organization | 14 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 783 | DMPC15186441_Speleonectes_tulumensis_0 | fibronectin type iii domain protein                              | 217 | 6.79E-12 | 48.10% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; F:calcium ion binding   | 5  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 784 | DMPC15186462_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_332703                           | 178 | 2.30E-61 | 56.10% | P:lipid transport; F:lipid transporter activity  | 2  | IPR001846; IPR014853; PTHR11339 (PANTHER)  |
| 785 | DMPC15186489_Speleonectes_tulumensis_1 | ---NA---   | 88  |          |        | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), SSF100895 (SUPERFAMILY)  |
| 786 | DMPC15186493_Speleonectes_tulumensis_1 | ferritin h subunit   | 97  | 3.30E-20 | 92.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 787 | DMPC15186517_Speleonectes_tulumensis_1 | ferritin gf1   | 115 | 1.52E-33 | 87.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 788 | DMPC15186521_Speleonectes_tulumensis_1 | ectonucleotide pyrophosphatase phosphodiesterase family member 6 | 122 | 9.93E-16 | 63.70% | C:cytoplasm; F:catalytic activity  | 2  | IPR017850; IPR024873; tmhmm (TMHMM)  |
| 789 | DMPC15186546_Speleonectes_tulumensis_0 | dermatopontin 2  | 363 | 2.71E-39 | 59.90% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 790 | DMPC15186552_Speleonectes_tulumensis_1 | cathepsin l  | 150 | 8.93E-72 | 79.40% | -  | 0  | IPR000668; IPR013128; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 791 | DMPC15186754_Speleonectes_tulumensis_1 | si:dkey- protein   | 106 | 7.77E-10 | 60.60% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 792 | DMPC15186817_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor                  | 134 | 2.68E-19 | 52.40% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 793 | DMPC15186867_Speleonectes_tulumensis_2 | chymotrypsin a   | 159 | 3.39E-35 | 59.40% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 794 | DMPC15186869_Speleonectes_tulumensis_2 | leucine rich repeat protein                                      | 338 | 1.31E-19 | 53.20% | -  | 0  | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR24367 (PANTHER), PF13504 (PFAM), PF13855 (PFAM), SM00364 (SMART), SSF52058 (SUPERFAMILY)                    |
| 795 | DMPC15186873_Speleonectes_tulumensis_1 | plasminogen activator spa  | 103 | 6.14E-08 | 62.67% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), tmhmm (TMHMM)  |
| 796 | DMPC15186896_Speleonectes_tulumensis_2 | ---NA---   | 112 |          |        | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)  |
| 797 | DMPC15187018_Speleonectes_tulumensis_1 | ---NA---   | 163 |          |        | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 798 | DMPC15187119_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor                  | 141 | 1.32E-17 | 51.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 799 | DMPC15187182_Speleonectes_tulumensis_1 | epididymal secretory protein e1 isoform 1                        | 126 | 2.77E-18 | 59.60% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

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| 800 | DMPC15187262_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor            | 160 | 5.44E-23 | 52.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding | 6 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 801 | DMPC15187365_Speleonectes_tulumensis_1 | serine-threonine kinase receptor-associated protein        | 72  | 6.63E-13 | 86.40% | F:receptor activity; F:kinase activity; P:metabolic process  | 3 | PTHR19877 (PANTHER)  |
| 802 | DMPC15187382_Speleonectes_tulumensis_0 | vitelline membrane outer layer protein 1 homolog precursor | 131 | 4.34E-09 | 55.33% | P:vitelline membrane formation   | 1 | IPR005515; PTHR18841:SF0 (PANTHER)   |
| 803 | DMPC15187384_Speleonectes_tulumensis_2 | chitinase 1 precursor                                      | 266 | 1.02E-46 | 55.80% | -  | 0 | IPR001223; IPR002557; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), PTHR11177:SF30 (PANTHER), SSF54556 (SUPERFAMILY) |
| 804 | DMPC15187398_Speleonectes_tulumensis_2 | plasminogen activator spa                                  | 96  | 4.11E-12 | 63.80% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |
| 805 | DMPC15187455_Speleonectes_tulumensis_2 | brasiliensin precursor                                     | 160 | 8.49E-24 | 53.10% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SSF100895 (SUPERFAMILY)                                 |
| 806 | DMPC15187538_Speleonectes_tulumensis_1 | peptidase thermolysin                                      | 164 | 4.48E-07 | 64.00% | P:proteolysis; F:hydrolase activity; F:metalloendopeptidase activity   | 3 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 807 | DMPC15187652_Speleonectes_tulumensis_0 | ---NA---   | 144 |          |        | -  | 0 | IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                 |
| 808 | DMPC15187711_Speleonectes_tulumensis_0 | glutamyl-peptide cyclotransferase                          | 163 | 2.28E-13 | 58.00% | P:proteolysis; F:transferase activity; F:peptidase activity  | 3 | PTHR12283 (PANTHER), PTHR12283:SF0 (PANTHER), tmhmm (TMHMM)  |
| 809 | DMPC15187713_Speleonectes_tulumensis_1 | anti-lipoplysaccharide factor isoform 7                    | 140 | 4.24E-31 | 68.20% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 810 | DMPC15187740_Speleonectes_tulumensis_2 | trypsin  | 202 | 9.52E-23 | 54.30% | F:catalytic activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                               |
| 811 | DMPC15187763_Speleonectes_tulumensis_2 | dermatopontin 2  | 107 | 3.20E-09 | 62.40% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 812 | DMPC15187818_Speleonectes_tulumensis_1 | peptidyl-prolyl cis-trans isomerase 5                      | 124 | 1.19E-36 | 90.90% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF63 (PANTHER), SignalP-NN(euk) (SIGNALP)                              |
| 813 | DMPC15187840_Speleonectes_tulumensis_0 | venom allergen 3   | 152 | 5.60E-21 | 51.20% | C:extracellular region   | 1 | IPR001283; IPR002413; IPR014044  |
| 814 | DMPC15187852_Speleonectes_tulumensis_2 | glucan pattern-recognition lipoprotein                     | 283 | 2.76E-16 | 46.50% | P:lipid transport; F:lipid transporter activity  | 2 | no IPS match   |
| 815 | DMPC15187972_Speleonectes_tulumensis_1 | alpha-galactosidase alpha-n-acetylgalactosaminidase        | 135 | 3.95E-56 | 83.70% | P:carbohydrate metabolic process; F:hydrolase activity   | 3 | IPR000111; IPR002241; IPR013785; IPR017853; PTHR11452 (PANTHER)  |
| 816 | DMPC15188029_Speleonectes_tulumensis_0 | intestinal trypsin 4 precursor                             | 114 | 1.63E-17 | 81.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 817 | DMPC15188077_Speleonectes_tulumensis_1 | plasminogen activator spa                                  | 150 | 9.16E-21 | 59.80% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                    |
| 818 | DMPC15188215_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor                 | 143 | 1.88E-15 | 57.30% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 819 | DMPC15188223_Speleonectes_tulumensis_2 | ame: full=carboxypeptidase b                               | 249 | 5.24E-97 | 69.10% | -  | 0 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 820 | DMPC15188266_Speleonectes_tulumensis_1 | aldh9a1a protein   | 140 | 5.02E-60 | 77.10% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016161; IPR016162; PTHR11699 (PANTHER), PTHR11699:SF47 (PANTHER)   |



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| 821 | DMPC15188433_Speleonectes_tulumensis_1 | female neotenic-specific protein 3                       | 152 | 4.22E-10 | 60.00% | -   | 0 | no IPS match   |
| 822 | DMPC15188464_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase                 | 241 | 5.90E-47 | 90.80% | C:cytoplasm; F:nucleotide binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; F:catalytic activity; P:metabolic process | 7 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)   |
| 823 | DMPC15188569_Speleonectes_tulumensis_1 | chymotrypsin a   | 150 | 1.16E-23 | 65.20% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)  |
| 824 | DMPC15188634_Speleonectes_tulumensis_3 | ---NA---   | 281 |          |        | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 825 | DMPC15188726_Speleonectes_tulumensis_2 | ---NA---   | 137 |          |        | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY)   |
| 826 | DMPC15188811_Speleonectes_tulumensis_2 | hyaluronan-binding protein 2-like                        | 126 | 1.07E-10 | 57.10% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 827 | DMPC15188821_Speleonectes_tulumensis_1 | cd74 major histocompatibility class ii invariant chain a | 134 | 4.30E-08 | 67.67% | P:multicellular organismal development  | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 828 | DMPC15188883_Speleonectes_tulumensis_2 | GL15638  | 234 | 1.49E-56 | 75.40% | P:metabolic process; F:peptidase activity   | 2 | IPR002933; G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER), SSF53187 (SUPERFAMILY)                                 |
| 829 | DMPC15189038_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like          | 137 | 1.80E-22 | 61.10% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 830 | DMPC15189192_Speleonectes_tulumensis_1 | ame: full=venom protein 302 flags: precursor             | 143 | 1.23E-10 | 65.00% | P:regulation of cell growth; F:insulin-like growth factor binding; C:extracellular region   | 3 | IPR000867; IPR011390; PS51257 (PROFILE), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 831 | DMPC15189221_Speleonectes_tulumensis_0 | cd74 major histocompatibility class ii invariant chain a | 106 | 1.95E-07 | 65.67% | P:multicellular organismal development  | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 832 | DMPC15189251_Speleonectes_tulumensis_3 | neuroglian-like isoform 2                                | 113 | 1.97E-33 | 80.70% | -   | 0 | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; PTHR10489 (PANTHER), PTHR10489:SF132 (PANTHER), SSF48726 (SUPERFAMILY)                |
| 833 | DMPC15189384_Speleonectes_tulumensis_0 | thioredoxin peroxidase                                   | 109 | 1.31E-27 | 81.70% | -   | 0 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF50 (PANTHER)  |
| 834 | DMPC15189399_Speleonectes_tulumensis_0 | chymotrypsin-like protease ctrl- partial                 | 128 | 1.67E-17 | 56.10% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                        |
| 835 | DMPC15189486_Speleonectes_tulumensis_0 | gamma-glutamyl hydrolase                                 | 265 | 1.11E-68 | 65.50% | F:peptidase activity; P:metabolic process   | 2 | IPR011697; IPR015527; G3DSA:3.40.50.880 (GENE3D), PTHR11315:SF0 (PANTHER), tmhmm (TMHMM), SSF52317 (SUPERFAMILY)                             |
| 836 | DMPC15189497_Speleonectes_tulumensis_2 | mite allergen tyr p 7                                    | 409 | 2.28E-18 | 47.90% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP)   |
| 837 | DMPC15189508_Speleonectes_tulumensis_1 | epoxide hydrolase 4                                      | 485 | 7.88E-97 | 60.50% | F:catalytic activity  | 1 | IPR000639; G3DSA:3.40.50.1820 (GENE3D), PTHR10992 (PANTHER), PTHR10992:SF98 (PANTHER), PF12697 (PFAM), tmhmm (TMHMM), SSF53474 (SUPERFAMILY) |
| 838 | DMPC15189516_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor          | 148 | 2.29E-19 | 49.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                   | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 839 | DMPC15189591_Speleonectes_tulumensis_0 | carboxypeptidase b-like                                  | 98  | 3.96E-30 | 72.70% | -   | 0 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 840 | DMPC15189592_Speleonectes_tulumensis_2 | cysteine string  | 122 | 4.00E-31 | 95.20% | P:protein metabolic process; F:protein binding  | 2 | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF7 (PANTHER), tmhmm (TMHMM)  |
| 841 | DMPC15189606_Speleonectes_tulumensis_1 | -like protein subfamily c member 11                      | 94  | 2.61E-30 | 89.20% | P:protein metabolic process; F:protein binding  | 2 | IPR001623; PTHR24078 (PANTHER), PTHR24078:SF6 (PANTHER)  |
| 842 | DMPC15189639_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor               | 119 | 6.31E-12 | 60.00% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|     |  |   |     |          |        |  |    |   |
|-----|--|---|-----|----------|--------|--|----|---|
| 843 | DMPC15189681_Speleonectes_tulumensis_0 | hemocyanin subunit 1  | 89  | 3.42E-15 | 81.33% | -  | 0  | IPR005203; IPR013788; IPR014756; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 844 | DMPC15189698_Speleonectes_tulumensis_2 | cg3556 cg3556-pa  | 242 | 1.60E-23 | 52.80% | P:cobalamin transport; F:cobalamin binding   | 2  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 845 | DMPC15189705_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a-like                   | 141 | 1.09E-50 | 97.40% | -  | 0  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)   |
| 846 | DMPC15189727_Speleonectes_tulumensis_0 | ---NA---  | 88  |          |        | -  | 0  | IPR002181; IPR014715; PTHR19143 (PANTHER), PTHR19143:SF46 (PANTHER)   |
| 847 | DMPC15189728_Speleonectes_tulumensis_0 | lipase 3  | 130 | 1.82E-36 | 67.10% | P:lipid metabolic process; F:hydrolase activity, acting on ester bonds; F:hydrolase activity; P:lipid catabolic process  | 4  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), tmhmm (TMHMM)  |
| 848 | DMPC15189914_Speleonectes_tulumensis_0 | peptidyl-prolyl cis-trans isomerase e                       | 384 | 4.58E-92 | 90.20% | P:protein metabolic process; P:cellular protein modification process; F:RNA binding; F:catalytic activity; F:nucleotide binding  | 5  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)   |
| 849 | DMPC15189943_Speleonectes_tulumensis_2 | anti-lipoplysaccharide factor                               | 133 | 5.72E-29 | 69.60% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 850 | DMPC15189976_Speleonectes_tulumensis_1 | membrane metallo-endopeptidase (neutral cd10) isoform cra_a | 265 | 4.21E-12 | 59.00% | P:biological_process; F:binding; C:cell; P:response to abiotic stimulus; F:peptidase activity; P:protein metabolic process; P:catabolic process; ; F:protein binding; P:multicellular organismal development; C:cytoplasm; C:plasma membrane | 12 | IPR000718; IPR018497; IPR024079; SSF55486 (SUPERFAMILY)   |
| 851 | DMPC15189996_Speleonectes_tulumensis_0 | apolipoprotein d-like isoform 2                             | 154 | 8.63E-21 | 61.60% | F:lipid binding; P:transport; F:transporter activity   | 3  | IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), IPR002933; IPR011650; G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER), SSF53187 (SUPERFAMILY) |
| 852 | DMPC15190084_Speleonectes_tulumensis_0 | cytosolic non-specific dipeptidase-like                     | 207 | 2.36E-98 | 78.90% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR002018; G3DSA:3.40.50.1820 (GENE3D), PTHR11559 (PANTHER), SSF53474 (SUPERFAMILY)   |
| 853 | DMPC15190145_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_305141                      | 117 | 6.24E-14 | 58.00% | F:carboxylic ester hydrolase activity  | 1  | IPR004169; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF57059 (SUPERFAMILY)   |
| 854 | DMPC15190216_Speleonectes_tulumensis_0 | u8-agatoxin-ao1a-like isoform 1                             | 152 | 2.20E-32 | 75.00% | -  | 0  | IPR002687; PTHR10894 (PANTHER), SSF89124 (SUPERFAMILY)  |
| 855 | DMPC15190273_Speleonectes_tulumensis_0 | nucleolar protein 5   | 118 | 6.58E-58 | 87.40% | -  | 0  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 856 | DMPC15190292_Speleonectes_tulumensis_0 | saxiphilin precursor  | 148 | 4.50E-11 | 62.20% | P:proteolysis; F:peptidase activity  | 2  | IPR001590; IPR006586; IPR024079; PTHR11905 (PANTHER), PF13574 (PFAM), SSF55486 (SUPERFAMILY)  |
| 857 | DMPC15190293_Speleonectes_tulumensis_2 | isoform a   | 273 | 7.10E-38 | 49.00% | P:proteolysis; P:cell proliferation; F:metalloendopeptidase activity; C:cellular component   | 4  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY)   |
| 858 | DMPC15190352_Speleonectes_tulumensis_2 | ---NA---  | 146 |          |        | -  | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 859 | DMPC15190383_Speleonectes_tulumensis_1 | plasminogen activator spa                                   | 153 | 1.95E-21 | 55.40% | F:hydrolase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF30 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 860 | DMPC15190401_Speleonectes_tulumensis_0 | ---NA---  | 149 |          |        | -  | 0  | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)   |
| 861 | DMPC15190466_Speleonectes_tulumensis_1 | cysteine protease family                                    | 183 | 1.68E-16 | 91.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  |   |

|     |  |   |     |          |        |  |   |   |
|-----|--|---|-----|----------|--------|--|---|---|
| 862 | DMPC15190494_Speleonectes_tulumensis_1 | phosphatidylethanolamine-binding protein homolog -like            | 146 | 1.63E-16 | 68.40% | -  | 0 | IPR008914; PTHR11362 (PANTHER), PTHR11362:SF0 (PANTHER)   |
| 863 | DMPC15190604_Speleonectes_tulumensis_0 | extracellular alkaline serine protease                            | 161 | 6.22E-20 | 64.60% | F:peptidase activity   | 1 | IPR007280; SignalP-NN(euk) (SIGNALP)  |
| 864 | DMPC15190612_Speleonectes_tulumensis_1 | serine protease   | 175 | 6.78E-09 | 55.20% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF33 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 865 | DMPC15190697_Speleonectes_tulumensis_0 | ferritin 3-like protein   | 125 | 9.44E-22 | 73.80% | F:binding  | 1 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 866 | DMPC15190737_Speleonectes_tulumensis_2 | histone h2a   | 183 | 2.03E-60 | 97.00% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4 | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 867 | DMPC15190750_Speleonectes_tulumensis_0 | dermatopontin 2   | 147 | 7.63E-19 | 59.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 868 | DMPC15190781_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                               | 188 | 1.92E-82 | 69.70% | -  | 0 | IPR005203; IPR013788; IPR014756   |
| 869 | DMPC15190783_Speleonectes_tulumensis_3 | female reproductive tract protease gleanr_896                     | 146 | 4.96E-20 | 70.30% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 870 | DMPC15190802_Speleonectes_tulumensis_0 | granulins precursor   | 179 | 2.69E-15 | 55.50% | -  | 0 | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER), tmhmm (TMHMM)  |
| 871 | DMPC15190943_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor                                    | 150 | 6.31E-31 | 67.20% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 872 | DMPC15190956_Speleonectes_tulumensis_2 | Otogelin, partial   | 261 | 3.56E-09 | 48.33% | -  | 0 | no IPS match  |
| 873 | DMPC15190968_Speleonectes_tulumensis_0 | ferritin  | 282 | 3.94E-20 | 84.00% | -  | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; IPR014034; tmhmm (TMHMM)   |
| 874 | DMPC15191122_Speleonectes_tulumensis_1 | uncharacterized aarf domain-containing protein kinase 1           | 193 | 6.33E-27 | 68.50% | F:transferase activity, transferring phosphorus-containing groups; F:ATP binding; F:protein kinase activity; P:protein phosphorylation                               | 4 | PTHR10566 (PANTHER), PTHR10566:SF24 (PANTHER), tmhmm (TMHMM)  |
| 875 | DMPC15191135_Speleonectes_tulumensis_2 | cytochrome b5-like heme steroid binding domain containing protein | 140 | 4.85E-20 | 66.90% | F:heme binding; F:molecular_function; P:biological_process; C:extracellular region; C:cellular_component   | 5 | IPR001199; PTHR10281 (PANTHER), PTHR10281:SF4 (PANTHER)   |
| 876 | DMPC15191189_Speleonectes_tulumensis_0 | adp-ribosylation factor-like protein 1-like                       | 123 | 5.21E-51 | 84.50% | C:intracellular; F:nucleotide binding; P:signal transduction   | 3 | IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER), PTHR11711:SF41 (PANTHER)                |
| 877 | DMPC15191194_Speleonectes_tulumensis_0 | pancreatic lipase-related protein 1                               | 355 | 1.45E-30 | 56.90% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; F:triglyceride lipase activity; C:extracellular region; F:retinyl-palmitate esterase activity | 6 | IPR000734; IPR013818; G3DSA:3.40.50.1820 (GENE3D), PTHR11610:SF32 (PANTHER), SSF53474 (SUPERFAMILY)                       |
| 878 | DMPC15191217_Speleonectes_tulumensis_1 | serine protease   | 160 | 5.54E-17 | 63.30% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)                  |
| 879 | DMPC15191264_Speleonectes_tulumensis_2 | soma ferritin   | 117 | 2.38E-22 | 86.50% | -  | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 880 | DMPC15191291_Speleonectes_tulumensis_0 | copper chaperone for superoxide dismutase                         | 204 | 3.37E-33 | 72.00% | -  | 0 | IPR001424; IPR024134; IPR024142   |
| 881 | DMPC15191349_Speleonectes_tulumensis_2 | histone -like   | 196 | 6.97E-65 | 99.60% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4 | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 882 | DMPC15191354_Speleonectes_tulumensis_2 | lysozyme precursor  | 197 | 1.12E-47 | 64.60% | F:lysozyme activity; P:cell wall macromolecule catabolic process   | 2 | IPR000974; IPR001916; IPR019799; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), SignalP-NN(euk) (SIGNALP)    |

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|-----|--|---|-----|----------|--------|--|---|---|
| 883 | DMPC15191361_Speleonectes_tulumensis_1 | dermatopontin 3                                   | 106 | 3.73E-08 | 60.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 884 | DMPC15191374_Speleonectes_tulumensis_2 | glutathione peroxidase 6                          | 143 | 1.11E-15 | 72.20% | F:catalytic activity; F:antioxidant activity; P:response to stress; P:metabolic process  | 4 | IPR000889; IPR012336  |
| 885 | DMPC15191529_Speleonectes_tulumensis_2 | adp-ribosylation factor 4                         | 155 | 1.60E-54 | 92.10% | F:nucleotide binding; C:Golgi apparatus; P:transport; P:signal transduction; P:protein transport                                   | 5 | IPR005225; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER)   |
| 886 | DMPC15191563_Speleonectes_tulumensis_0 | epididymal secretory protein e1 isoform 1         | 138 | 1.14E-19 | 60.10% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding                   | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 887 | DMPC15191603_Speleonectes_tulumensis_0 | chitinase partial                                 | 125 | 5.60E-41 | 81.60% | F:hydrolase activity; F:binding; P:carbohydrate metabolic process; P:catabolic process   | 4 | IPR001223; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                        |
| 888 | DMPC15191667_Speleonectes_tulumensis_2 | neutral ceramidase b                              | 225 | 5.18E-69 | 68.40% | -  | 0 | IPR006823   |
| 889 | DMPC15191690_Speleonectes_tulumensis_2 | trypsin   | 145 | 6.29E-57 | 77.00% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)  |
| 890 | DMPC15191691_Speleonectes_tulumensis_2 | venom allergen 5-like                             | 198 | 1.86E-09 | 58.80% | C:extracellular region   | 1 | IPR001283; IPR002172; IPR014044; IPR023415  |
| 891 | DMPC15191869_Speleonectes_tulumensis_1 | thioredoxin 1                                     | 147 | 2.54E-52 | 83.30% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process | 5 | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-NN(euk) (SIGNALP)   |
| 892 | DMPC15191872_Speleonectes_tulumensis_1 | ---NA---  | 134 |          |        | -  | 0 | IPR000742; IPR013032; G3DSA:2.10.25.10 (GENE3D), PTHR24838 (PANTHER), tmhmm (TMHMM), SSF57196 (SUPERFAMILY)                                     |
| 893 | DMPC15191886_Speleonectes_tulumensis_0 | purple acid                                       | 105 | 9.11E-45 | 83.30% | F:binding; F:hydrolase activity  | 2 | IPR004843; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), SSF56300 (SUPERFAMILY)                                      |
| 894 | DMPC15191896_Speleonectes_tulumensis_2 | protein bv8                                       | 104 | 2.89E-11 | 61.60% | -  | 0 | G3DSA:2.10.80.10 (GENE3D)   |
| 895 | DMPC15191924_Speleonectes_tulumensis_2 | ecdysteroid-regulated protein                     | 151 | 1.30E-13 | 50.40% | -  | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 896 | DMPC15191941_Speleonectes_tulumensis_0 | proclotting enzyme                                | 135 | 1.58E-26 | 61.90% | F:peptidase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 897 | DMPC15191960_Speleonectes_tulumensis_1 | peptidyl-prolyl cis-trans cyclophilin-type family | 159 | 6.15E-21 | 83.40% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)  |
| 898 | DMPC15192006_Speleonectes_tulumensis_0 | ---NA---  | 93  |          |        | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 899 | DMPC15192027_Speleonectes_tulumensis_1 | protein shifted-like                              | 239 | 3.71E-41 | 76.20% | -  | 0 | IPR000742; IPR013032; G3DSA:2.10.25.10 (GENE3D), PTHR24838 (PANTHER), SSF57196 (SUPERFAMILY)  |
| 900 | DMPC15192073_Speleonectes_tulumensis_1 | mast cell protease 6                              | 198 | 1.03E-58 | 73.60% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER)  |
| 901 | DMPC15192078_Speleonectes_tulumensis_2 | cathepsin 1 precursor                             | 154 | 1.27E-13 | 90.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                              |
| 902 | DMPC15192185_Speleonectes_tulumensis_0 | dermatopontin 3                                   | 106 | 1.50E-12 | 64.10% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 903 | DMPC15192231_Speleonectes_tulumensis_0 | trypsin partial                                   | 124 | 2.04E-11 | 64.90% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)         |

|     |  |   |     |          |        |   |   |   |
|-----|--|---|-----|----------|--------|---|---|---|
| 904 | DMPC15192327_Speleonectes tulumensis_1 | soma ferritin   | 123 | 1.16E-27 | 88.90% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 905 | DMPC15192413_Speleonectes tulumensis_1 | ---NA---  | 107 |          |        | -   | 0 | IPR024509   |
| 906 | DMPC15192472_Speleonectes tulumensis_5 | salivary hyaluronidase  | 167 | 6.61E-11 | 60.90% | F:catalytic activity  | 1 | IPR013785; IPR017853; IPR018155; tmhmm (TMHMM)  |
| 907 | DMPC15192530_Speleonectes tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor   | 130 | 2.80E-13 | 48.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)                              |
| 908 | DMPC15192596_Speleonectes tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase  | 127 | 2.50E-10 | 66.10% | -   | 0 | IPR004911   |
| 909 | DMPC15192602_Speleonectes tulumensis_0 | ensangp00000031746-like protein   | 107 | 3.84E-57 | 88.20% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity  | 3 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF41 (PANTHER)                  |
| 910 | DMPC15192615_Speleonectes tulumensis_1 | kazal-type protease inhibitor   | 99  | 6.20E-13 | 57.30% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)                    |
| 911 | DMPC15192695_Speleonectes tulumensis_2 | serpin peptidase clade b member 6   | 151 | 5.75E-19 | 70.00% | F:protein metabolic process; F:regulation of biological process; P:catabolic process; F:enzyme regulator activity; P:biological process             | 5 | IPR000215; IPR023796; G3DSA:3.30.497.10 (GENE3D)  |
| 912 | DMPC15192737_Speleonectes tulumensis_0 | coiled-coil domain-containing protein 75  | 159 | 1.57E-31 | 66.00% | F:nucleic acid binding  | 1 | IPR000467; PTHR21032 (PANTHER)  |
| 913 | DMPC15192764_Speleonectes tulumensis_0 | serine protease homolog 93 precursor  | 94  | 7.84E-09 | 71.00% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)                       |
| 914 | DMPC15192901_Speleonectes tulumensis_2 | lysine--trna ligase-like  | 140 | 1.42E-55 | 93.30% | -   | 0 | IPR002313; IPR004364; IPR006195; IPR018150; G3DSA:3.30.930.10 (GENE3D), SSF55681 (SUPERFAMILY)        |
| 915 | DMPC15192903_Speleonectes tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor   | 133 | 3.18E-21 | 53.40% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 916 | DMPC15193007_Speleonectes tulumensis_0 | enolase   | 231 | 3.85E-44 | 78.60% | F:catalytic activity  | 1 | IPR000941; IPR020810; G3DSA:3.20.20.120 (GENE3D), SSF51604 (SUPERFAMILY)                              |
| 917 | DMPC15193097_Speleonectes tulumensis_2 | ame: full=zinc metalloproteinase disintegrin contains: ame: full=snake venom metalloproteinase short=svmp contains: ame: full=disintegrin flavoridin flags: precursor | 188 | 2.59E-09 | 54.80% | -   | 0 | IPR002870; PTHR11905 (PANTHER), tmhmm (TMHMM)   |
| 918 | DMPC15193112_Speleonectes tulumensis_0 | serine protease inhibitor   | 174 | 6.78E-18 | 57.30% | P:proteolysis; F:peptidase activity; F:serine-type endopeptidase inhibitor activity   | 3 | IPR000215; IPR023796; G3DSA:2.30.39.10 (GENE3D), G3DSA:3.30.497.10 (GENE3D), PTHR11461:SF71 (PANTHER) |
| 919 | DMPC15193211_Speleonectes tulumensis_2 | pdz domain-containing protein 2   | 288 | 5.27E-38 | 76.60% | -   | 0 | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR19964 (PANTHER), PTHR19964:SF22 (PANTHER)                   |
| 920 | DMPC15193231_Speleonectes tulumensis_0 | si:dkey- protein  | 151 | 6.67E-24 | 61.80% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 921 | DMPC15193238_Speleonectes tulumensis_2 | serine protease inhibitor   | 199 | 2.81E-13 | 63.80% | F:serine-type endopeptidase inhibitor activity; P:proteolysis; F:peptidase activity   | 3 | IPR000215; IPR023795; IPR023796; G3DSA:2.30.39.10 (GENE3D)  |
| 922 | DMPC15193337_Speleonectes tulumensis_2 | dermatopontin 3   | 131 | 4.64E-11 | 59.80% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 923 | DMPC15193368_Speleonectes tulumensis_1 | histone 1   | 386 | 2.92E-26 | 81.80% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4 | IPR005818; IPR005819; IPR011991; PTHR11467 (PANTHER), PTHR11467:SF0 (PANTHER), SSF46785 (SUPERFAMILY) |
| 924 | DMPC15193412_Speleonectes tulumensis_2 | 27 kda hemolymph protein  | 125 | 2.98E-14 | 54.40% | C:extracellular region  | 1 | IPR009832; PTHR20997 (PANTHER), PTHR20997:SF0 (PANTHER)   |
| 925 | DMPC15193474_Speleonectes tulumensis_0 | soma ferritin   | 118 | 3.87E-31 | 89.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |

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|-----|--|---|-----|-----------|--------|---|---|--|
| 926 | DMPC15193478_Speleonectes_tulumensis_2 | sel11 protein                                   | 348 | 1.54E-91  | 81.40% | F:hydrolase activity  | 1 | IPR006597; IPR011990; PTHR11102 (PANTHER), PTHR11102:SF26 (PANTHER), tmhmm (TMHMM), SSF81901 (SUPERFAMILY)                           |
| 927 | DMPC15193480_Speleonectes_tulumensis_0 | leucine-rich repeat-containing protein 47-like  | 160 | 4.15E-21  | 65.10% | F:RNA binding; F:phenylalanine-tRNA ligase activity; F:aminoacyl-tRNA ligase activity   | 3 | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR23155 (PANTHER), PF13855 (PFAM), SM00364 (SMART), SSF52058 (SUPERFAMILY)        |
| 928 | DMPC15193570_Speleonectes_tulumensis_0 | serine protease                                 | 100 | 5.31E-09  | 64.10% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF3 (PANTHER)                             |
| 929 | DMPC15193608_Speleonectes_tulumensis_1 | cationic trypsin-3-like                         | 238 | 7.92E-17  | 60.60% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 930 | DMPC15193629_Speleonectes_tulumensis_0 | phosphoglycerate kinase                         | 187 | 4.25E-94  | 86.40% | P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; P:metabolic process; F:kinase activity   | 5 | IPR001576; IPR015901   |
| 931 | DMPC15193639_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 132 | 1.90E-21  | 53.00% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding                        | 6 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 932 | DMPC15193718_Speleonectes_tulumensis_2 | trypsin-like serine protease                    | 439 | 1.39E-17  | 53.70% | F:catalytic activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)   |
| 933 | DMPC15193759_Speleonectes_tulumensis_2 | membrane metallo-endopeptidase-like 1-like      | 103 | 8.49E-24  | 59.60% | P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:metalloendopeptidase activity   | 4 | IPR000718; IPR018497; IPR024079; SSF55486 (SUPERFAMILY)  |
| 934 | DMPC15193794_Speleonectes_tulumensis_2 | zinc finger protein 502-like                    | 127 | 4.90E-09  | 63.70% | C:intracellular; F:binding  | 2 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), SSF57667 (SUPERFAMILY)                                |
| 935 | DMPC15193839_Speleonectes_tulumensis_1 | dehydrogenase reductase sdr family member 4     | 403 | 8.79E-108 | 75.00% | P:metabolic process   | 1 | IPR002198; IPR002347; IPR016040; IPR020904; IPR027052; PTHR24322 (PANTHER), PF13561 (PFAM), tmhmm (TMHMM), SSF51735 (SUPERFAMILY)    |
| 936 | DMPC15193840_Speleonectes_tulumensis_2 | serine protease p127                            | 122 | 2.70E-15  | 58.80% | F:catalytic activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)   |
| 937 | DMPC15193844_Speleonectes_tulumensis_0 | peptidylprolyl isomerase-like 1-like isoform 1  | 97  | 2.43E-18  | 90.60% | P:cellular protein modification process; C:nucleus; P:protein metabolic process; P:reproduction; P:behavior; P:regulation of biological process; F:catalytic activity; P:nucleobase-containing compound metabolic process | 8 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF41 (PANTHER)   |
| 938 | DMPC15193982_Speleonectes_tulumensis_0 | anti-lipoplysaccharide factor isoform 7         | 136 | 1.57E-26  | 63.70% | -   | 0 | IPR024509; IPR024716   |
| 939 | DMPC15194027_Speleonectes_tulumensis_1 | lissencephaly-1 homolog                         | 216 | 3.03E-49  | 91.40% | C:cytoplasm; P:organelle organization; P:cell cycle; P:transport; F:hydrolase activity; P:biological_process; C:cytoskeleton; C:protein complex   | 8 | IPR001680; IPR015943; IPR017252; IPR017986; IPR019775; PTHR22847 (PANTHER), tmhmm (TMHMM)  |
| 940 | DMPC15194040_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor             | 83  | 3.02E-33  | 72.00% | -   | 0 | IPR005203; IPR013788; IPR014756  |
| 941 | DMPC15194104_Speleonectes_tulumensis_2 | calponin transgelin                             | 184 | 2.13E-63  | 90.20% | F:actin binding; P:cytoskeleton organization  | 2 | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER), PTHR18959:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP)                             |
| 942 | DMPC15194122_Speleonectes_tulumensis_2 | C-factor  | 136 | 1.23E-19  | 67.60% | P:metabolic process   | 1 | IPR016040; PTHR24322 (PANTHER), PTHR24322:SF57 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 943 | DMPC15194177_Speleonectes_tulumensis_2 | soma ferritin                                   | 116 | 8.28E-24  | 88.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |

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|-----|--|---|-----|----------|--------|--|---|--|
| 944 | DMPC15194181_Speleonectes_tulumensis_1 | mantle protein 9  | 134 | 1.03E-08 | 67.75% | -  | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)   |
| 945 | DMPC15194194_Speleonectes_tulumensis_1 | prosalusin-like isoform 1   | 157 | 1.42E-14 | 61.70% | F:ATP binding; P:chaperone mediated protein folding requiring cofactor   | 2 | IPR010448; PTHR10760:SF2 (PANTHER), tmhmm (TMHMM)  |
| 946 | DMPC15194201_Speleonectes_tulumensis_1 | anti-lipopolsaccharide factor isoform 7                               | 250 | 6.69E-29 | 68.30% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 947 | DMPC15194252_Speleonectes_tulumensis_0 | ---NA---  | 130 |          |        | -  | 0 | IPR008160; PTHR24023 (PANTHER), PTHR24023:SF164 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 948 | DMPC15194259_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like                       | 152 | 2.26E-24 | 63.90% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 949 | DMPC15194304_Speleonectes_tulumensis_1 | female reproductive tract protease gleanr_898                         | 147 | 6.04E-21 | 57.60% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 950 | DMPC15194309_Speleonectes_tulumensis_1 | alkyl hydroperoxide reductase thiol specific antioxidant mal allergen | 159 | 1.46E-55 | 66.80% | F:catalytic activity   | 1 | IPR000866; IPR012336; IPR019479; IPR024706; PTHR10681 (PANTHER), PTHR10681:SF51 (PANTHER)  |
| 951 | DMPC15194310_Speleonectes_tulumensis_1 | thioredoxin 1   | 121 | 1.94E-22 | 83.00% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process   | 5 | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)   |
| 952 | DMPC15194321_Speleonectes_tulumensis_0 | discoidin domain-containing receptor 2-like                           | 109 | 9.06E-10 | 63.40% | -  | 0 | IPR001245; IPR011009; G3DSA:3.30.200.20 (GENE3D), PTHR24416 (PANTHER), PTHR24416:SF84 (PANTHER), G3DSA:3.50.50.60 (GENE3D), PTHR10742 (PANTHER), PTHR10742:SF16 (PANTHER), PF13450 (PFAM), tmhmm (TMHMM), SSF51905 (SUPERFAMILY) |
| 953 | DMPC15194385_Speleonectes_tulumensis_2 | protoporphyrinogen oxidase-like                                       | 131 | 3.51E-11 | 73.60% | P:metabolic process; F:catalytic activity  | 2 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 954 | DMPC15194457_Speleonectes_tulumensis_1 | kazal-type protease inhibitor   | 185 | 5.62E-15 | 54.60% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 955 | DMPC15194466_Speleonectes_tulumensis_0 | l-xylulose reductase-like   | 126 | 6.13E-42 | 72.80% | P:carbohydrate metabolic process; F:catalytic activity; C:cell   | 3 | IPR002198; IPR002347; IPR016040; PTHR24311 (PANTHER), PTHR24311:SF0 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 956 | DMPC15194549_Speleonectes_tulumensis_0 | female neotenic-specific protein 3                                    | 153 | 5.53E-11 | 57.00% | -  | 0 | tmhmm (TMHMM)  |
| 957 | DMPC15194578_Speleonectes_tulumensis_5 | hypothetical protein DAPPUDRAFT_303360                                | 131 | 2.40E-08 | 64.00% | -  | 0 | IPR024079; PTHR13723 (PANTHER), PTHR13723:SF38 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 958 | DMPC15194582_Speleonectes_tulumensis_0 | oocyte protease inhibitor-1 precursor                                 | 123 | 3.63E-09 | 64.40% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), PTHR12352:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 959 | DMPC15194588_Speleonectes_tulumensis_2 | projectin short variant   | 239 | 9.40E-22 | 52.70% | P:biological_process; F:transferase activity; P:anatomical structure morphogenesis; F:structural molecule activity; C:cytoplasm  | 5 | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; PTHR10489 (PANTHER), SSF48726 (SUPERFAMILY)   |
| 960 | DMPC15194625_Speleonectes_tulumensis_1 | eclosion hormone-like   | 276 | 2.47E-15 | 62.70% | P:ecdysis, chitin-based cuticle; P:neuropeptide signaling pathway; F:ecdysis-triggering hormone activity   | 3 | IPR006825; tmhmm (TMHMM)   |
| 961 | DMPC15194681_Speleonectes_tulumensis_2 | 40s ribosomal protein s15a  | 150 | 1.20E-12 | 75.10% | C:ribosome; F:structural molecule activity; P:translation  | 3 | IPR000630; IPR008037; IPR020862; G3DSA:3.30.1490.10 (GENE3D), SignalP-NN(euk) (SIGNALP)  |
| 962 | DMPC15194733_Speleonectes_tulumensis_0 | protein   | 139 | 3.62E-17 | 52.00% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                      | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 963 | DMPC15194764_Speleonectes_tulumensis_0 | protein   | 130 | 1.90E-12 | 51.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:proteolysis; F:peptidase activity | 6 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |

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|-----|--|---|-----|----------|--------|---|----|--|
| 964 | DMPC15194800_Speleonectes_tulumensis_0 | matrix metalloproteinase-9                    | 360 | 5.79E-16 | 52.10% | F:carbohydrate binding; P:extracellular matrix organization; P:positive regulation of apoptotic process; P:positive regulation of keratinocyte migration; F:metalloendopeptidase activity; P:skeletal system development; F:zinc ion binding; P:embryo implantation; C:proteinaceous extracellular matrix; C:extracellular matrix; P:proteolysis; P:collagen catabolic process; C:extracellular space | 13 | IPR000562; IPR013806; PTHR22918 (PANTHER), PTHR22918:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 965 | DMPC15194809_Speleonectes_tulumensis_2 | trypsin                                       | 151 | 2.96E-25 | 65.20% | -   | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 966 | DMPC15194921_Speleonectes_tulumensis_0 | ferritin subunit                              | 106 | 3.44E-21 | 80.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 967 | DMPC15194972_Speleonectes_tulumensis_0 | peroxidase-like isoform 2                     | 284 | 1.52E-85 | 63.30% | -   | 0  | IPR002007; IPR010255; IPR019791; PTHR11475 (PANTHER)   |
| 968 | DMPC15195045_Speleonectes_tulumensis_1 | fat tumor suppressor-like protein partial     | 155 | 6.43E-27 | 63.50% | C:cell  | 1  | IPR002126; IPR015919; IPR020894; PTHR24027 (PANTHER), tmhmm (TMHMM)  |
| 969 | DMPC15195111_Speleonectes_tulumensis_0 | 14-3-3 zeta                                   | 249 | 2.31E-86 | 75.20% | F:protein domain specific binding   | 1  | IPR000308; IPR023409; IPR023410; PTHR18860:SF0 (PANTHER)   |
| 970 | DMPC15195138_Speleonectes_tulumensis_0 | serine protease 19                            | 111 | 3.44E-08 | 65.14% | F:hydrolase activity  | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)   |
| 971 | DMPC15195179_Speleonectes_tulumensis_3 | terribly reduced optic isoform ad             | 131 | 2.10E-25 | 64.00% | P:anatomical structure morphogenesis; P:cellular component organization; C:lipid particle; C:proteinaceous extracellular matrix   | 4  | IPR002172; PTHR10529 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 972 | DMPC15195219_Speleonectes_tulumensis_2 | trypsin i-p1                                  | 160 | 1.03E-25 | 48.80% | P:proteolysis; F:serine-type endopeptidase activity; F:hydrolase activity; F:catalytic activity   | 4  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER)   |
| 973 | DMPC15195412_Speleonectes_tulumensis_1 | kazal-type serine protease inhibitor 1 serpin | 122 | 2.95E-09 | 66.60% | -   | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 974 | DMPC15195421_Speleonectes_tulumensis_1 | proclotting enzyme                            | 201 | 1.51E-65 | 69.00% | F:hydrolase activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)   |
| 975 | DMPC15195423_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor           | 165 | 3.87E-79 | 62.20% | -   | 0  | IPR005203; IPR013788; IPR014756  |
| 976 | DMPC15195455_Speleonectes_tulumensis_3 | ensangp00000031746-like protein               | 69  | 2.21E-17 | 99.40% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity  | 3  | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF41 (PANTHER), tmhmm (TMHMM)  |
| 977 | DMPC15195470_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor           | 147 | 5.04E-91 | 70.10% | -   | 0  | IPR005203; IPR013788; IPR014756; PTHR11511:SF4 (PANTHER)   |
| 978 | DMPC15195516_Speleonectes_tulumensis_1 | ligand of numb protein x 2-like               | 377 | 1.89E-66 | 62.80% | F:metal ion binding; F:zinc ion binding   | 2  | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR19964 (PANTHER)  |
| 979 | DMPC15195608_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor                | 144 | 1.42E-30 | 67.60% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 980 | DMPC15195633_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                | 145 | 6.70E-31 | 68.10% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 981 | DMPC15195645_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200        | 144 | 2.22E-09 | 49.50% | -   | 0  | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 982 | DMPC15195652_Speleonectes_tulumensis_2 | cationic trypsin-3-like                       | 118 | 3.11E-14 | 53.40% | P:proteolysis; P:extracellular matrix disassembly; F:serine-type endopeptidase activity; P:extracellular matrix organization; C:extracellular region  | 5  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24250 (PANTHER), SignalP-NN(euk) (SIGNALP)  |



|      |  |  |     |          |        |  |    |   |
|------|--|--|-----|----------|--------|--|----|---|
| 983  | DMPC15195693_Speleonectes_tulumensis_0 | lysozyme precursor   | 149 | 2.15E-45 | 67.20% | F:lysozyme activity; P:cell wall macromolecule catabolic process   | 2  | IPR000974; IPR001916; IPR019799; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER)   |
| 984  | DMPC15195712_Speleonectes_tulumensis_1 | ferritin 3-like protein  | 128 | 4.00E-25 | 80.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 985  | DMPC15195872_Speleonectes_tulumensis_2 | ame: full=serine protease inhibitor dipetalogastin short=dipetalin flags: precursor  | 126 | 4.57E-11 | 59.70% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY)                           |
| 986  | DMPC15195938_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor  | 154 | 5.72E-69 | 69.10% | -  | 0  | IPR005203; IPR013788; IPR014756   |
| 987  | DMPC15195947_Speleonectes_tulumensis_0 | multiple inositol polyphosphate phosphatase 1-like   | 275 | 1.71E-41 | 60.00% | F:hydrolase activity   | 1  | IPR000560; G3DSA:3.40.50.1240 (GENE3D), PTHR20963 (PANTHER), PTHR20963:SF8 (PANTHER), tmhmm (TMHMM), SSF53254 (SUPERFAMILY)                                       |
| 988  | DMPC15195948_Speleonectes_tulumensis_2 | ---NA---   | 68  |          |        | -  | 0  | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 989  | DMPC15195966_Speleonectes_tulumensis_2 | glutathione peroxidase 1   | 203 | 3.97E-37 | 82.10% | F:catalytic activity; F:antioxidant activity; C:cytoplasm; P:response to stress  | 4  | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)   |
| 990  | DMPC15195978_Speleonectes_tulumensis_2 | anti-lipoplysaccharide factor isoform 7  | 154 | 1.18E-16 | 60.50% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 991  | DMPC15196033_Speleonectes_tulumensis_0 | laminin a  | 211 | 6.88E-57 | 63.50% | P:biological_process; P:regulation of biological process   | 2  | IPR001791; IPR008985; IPR013320; PTHR10574 (PANTHER), PTHR10574:SF56 (PANTHER)  |
| 992  | DMPC15196035_Speleonectes_tulumensis_0 | peptidyl-prolyl cis-trans isomerase fkbp14-like  | 197 | 3.68E-63 | 72.80% | P:protein metabolic process; F:calcium ion binding   | 2  | IPR001179; IPR002048; IPR018247; IPR023566; G3DSA:3.10.50.40 (GENE3D), PTHR10516:SF20 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54534 (SUPERFAMILY) |
| 993  | DMPC15196063_Speleonectes_tulumensis_0 | von willebrand factor type egf and pentraxin domain-containing protein 1   | 153 | 4.10E-12 | 54.60% | F:carbohydrate binding; F:hydrolase activity   | 2  | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER), PTHR19325:SF43 (PANTHER), tmhmm (TMHMM)  |
| 994  | DMPC15196080_Speleonectes_tulumensis_2 | chymotrypsin a   | 149 | 9.92E-21 | 67.20% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), tmhmm (TMHMM)  |
| 995  | DMPC15196086_Speleonectes_tulumensis_2 | astakine variant 2   | 148 | 2.96E-11 | 61.60% | -  | 0  | G3DSA:2.10.80.10 (GENE3D)   |
| 996  | DMPC15196111_Speleonectes_tulumensis_1 | lipase 3-like  | 135 | 3.99E-33 | 69.80% | F:hydrolase activity; P:lipid metabolic process  | 2  | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), SSF53474 (SUPERFAMILY)   |
| 997  | DMPC15196130_Speleonectes_tulumensis_1 | a chain crystal spectroscopic and catalytic properties of cobalt copper nickel and mercury derivatives of the zinc endopeptidase a correlation of structure and proteolytic activity | 147 | 4.27E-09 | 69.60% | C:cell; C:protein complex; P:reproduction; P:regulation of biological process; F:peptidase activity; F:binding; C:cytoplasmic membrane-bounded vesicle; P:biological_process; P:protein metabolic process; C:plasma membrane | 10 | IPR001506; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SSF55486 (SUPERFAMILY)   |
| 998  | DMPC15196177_Speleonectes_tulumensis_1 | ferritin   | 109 | 8.80E-40 | 77.80% | -  | 0  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 999  | DMPC15196180_Speleonectes_tulumensis_1 | si:dkey- protein   | 117 | 1.30E-09 | 60.20% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1000 | DMPC15196208_Speleonectes_tulumensis_0 | cg4147   | 108 | 9.00E-41 | 94.00% | F:nucleotide binding   | 1  | IPR013126; G3DSA:2.60.34.10 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100920 (SUPERFAMILY)                            |
| 1001 | DMPC15196224_Speleonectes_tulumensis_2 | chh xo- variant 4  | 145 | 1.91E-22 | 74.10% | F:neuropeptide hormone activity; C:extracellular region  | 2  | IPR001166   |
| 1002 | DMPC15196317_Speleonectes_tulumensis_2 | ecdysteroid-regulated protein  | 149 | 2.05E-08 | 58.40% | P:cholesterol efflux; P:response to virus; P:intracellular cholesterol transport; C:extracellular region   | 8  | IPR003172; IPR014756; PTHR11306 (PANTHER)   |

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|------|--|--|-----|----------|--------|--|----|---|
| 1003 | DMPC15196408_Speleonectes_tulumensis_1 | female neotenic-specific protein 3   | 140 | 4.61E-10 | 58.50% | -  | 0  | tmhmm (TMHMM)   |
| 1004 | DMPC15196428_Speleonectes_tulumensis_1 | ancylostoma secreted   | 123 | 6.57E-07 | 51.00% | -  | 0  | IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1005 | DMPC15196459_Speleonectes_tulumensis_2 | kelch-like protein 18-like   | 359 | 4.90E-73 | 80.40% | -  | 0  | IPR006652; IPR015915; PR00501 (PRINTS), PTHR24414 (PANTHER), PTHR24414:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF117281 (SUPERFAMILY) |
| 1006 | DMPC15196531_Speleonectes_tulumensis_2 | zinc finger protein 271 (zinc finger protein 7) (zinc finger protein znfphe133) (epstein-barr virus-induced zinc finger protein) (znf-eb) (ct-zfp48) (zinc finger protein) | 119 | 1.75E-23 | 64.10% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PTHR11389:SF381 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                                 |
| 1007 | DMPC15196562_Speleonectes_tulumensis_0 | oocyte protease inhibitor-1 precursor  | 116 | 7.61E-11 | 65.40% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1008 | DMPC15196615_Speleonectes_tulumensis_2 | thioredoxin peroxidase   | 126 | 1.19E-62 | 69.00% | -  | 0  | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)   |
| 1009 | DMPC15196698_Speleonectes_tulumensis_2 | trypsin-like serine proteinase 2   | 133 | 1.56E-11 | 58.80% | F:hydrolase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), tmhmm (TMHMM)  |
| 1010 | DMPC15196769_Speleonectes_tulumensis_2 | perlucin 5   | 138 | 8.80E-12 | 49.70% | F:protein binding  | 1  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1011 | DMPC15196778_Speleonectes_tulumensis_1 | core 1 glycoprotein-n-acetylgalactosamine 3-beta-1-like  | 93  | 2.58E-07 | 74.00% | C:Golgi cisterna membrane; C:membrane; F:transferase activity, transferring hexosyl groups; F:transferase activity, transferring glycosyl groups   | 4  | IPR008428   |
| 1012 | DMPC15196802_Speleonectes_tulumensis_2 | ame: full=conoporin-cn1 flags: precursor   | 229 | 5.28E-27 | 52.20% | -  | 0  | IPR009104; IPR015926  |
| 1013 | DMPC15196842_Speleonectes_tulumensis_1 | ---NA---   | 128 |          |        | -  | 0  | no IPS match  |
| 1014 | DMPC15196855_Speleonectes_tulumensis_1 | membrane metallo-endopeptidase-like 1-like   | 143 | 1.27E-54 | 75.20% | -  | 0  | IPR000718; IPR018497; IPR024079; PTHR11733:SF24 (PANTHER), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)  |
| 1015 | DMPC15196889_Speleonectes_tulumensis_2 | trypsin 7  | 128 | 3.57E-35 | 72.20% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1016 | DMPC15196906_Speleonectes_tulumensis_1 | lysozyme precursor   | 127 | 1.19E-09 | 80.00% | -  | 0  | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER), tmhmm (TMHMM)   |
| 1017 | DMPC15196910_Speleonectes_tulumensis_0 | ubiquitin-60s ribosomal protein 140-like   | 125 | 9.15E-43 | 98.80% | F:peptidase activity; P:cell cycle; F:protein binding; P:cellular protein modification process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; F:catalytic activity; P:protein transport; ; C:endosome; F:nucleotide binding; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport | 30 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                      |

|      |  |  |     |           |        |   |   |   |
|------|--|--|-----|-----------|--------|---|---|---|
| 1018 | DMPC15197036_Speleonectes_tulumensis_2 | serine protease inhibitor dipetalogastin precursor | 157 | 7.35E-15  | 51.60% | P:proteolysis; F:peptidase activity   | 2 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)                       |
| 1019 | DMPC15197049_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like    | 130 | 1.16E-25  | 64.10% | -   | 0 | IPR026645   |
| 1020 | DMPC15197164_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor                | 129 | 1.92E-70  | 68.60% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1021 | DMPC15197211_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like    | 138 | 1.23E-13  | 57.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1022 | DMPC15197217_Speleonectes_tulumensis_2 | dermatopontin 3                                    | 103 | 9.50E-08  | 59.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1023 | DMPC15197246_Speleonectes_tulumensis_0 | nucleolar protein 56-like                          | 370 | 2.76E-125 | 90.80% | -   | 0 | IPR002687; IPR012976; PTHR10894 (PANTHER), SSF89124 (SUPERFAMILY)   |
| 1024 | DMPC15197339_Speleonectes_tulumensis_0 | ---NA---   | 105 |           |        | -   | 0 | IPR002047; IPR010475; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1025 | DMPC15197414_Speleonectes_tulumensis_1 | trypsin 3  | 129 | 2.04E-40  | 80.60% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 1026 | DMPC15197448_Speleonectes_tulumensis_1 | ---NA---   | 155 |           |        | -   | 0 | IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER)  |
| 1027 | DMPC15197465_Speleonectes_tulumensis_0 | dermatopontin 3                                    | 102 | 5.75E-08  | 65.29% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1028 | DMPC15197503_Speleonectes_tulumensis_0 | oocyte zinc finger protein 6-like                  | 280 | 3.85E-28  | 58.90% | F:nucleic acid binding; P:biological_process; F:zinc ion binding; C:intracellular             | 4 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                            |
| 1029 | DMPC15197505_Speleonectes_tulumensis_0 | ---NA---   | 216 |           |        | -   | 0 | no IPS match  |
| 1030 | DMPC15197516_Speleonectes_tulumensis_2 | pacifastin light chain                             | 130 | 5.10E-07  | 53.00% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity                   | 2 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1031 | DMPC15197531_Speleonectes_tulumensis_0 | ferritin subunit                                   | 104 | 1.98E-20  | 87.10% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1032 | DMPC15197540_Speleonectes_tulumensis_0 | protein  | 145 | 6.45E-17  | 58.60% | C:extracellular region  | 1 | IPR001283; IPR014044  |
| 1033 | DMPC15197605_Speleonectes_tulumensis_2 | female neotenic-specific protein 3                 | 125 | 6.24E-12  | 53.80% | -   | 0 | no IPS match  |
| 1034 | DMPC15197655_Speleonectes_tulumensis_1 | superoxide dismutase mitochondrial                 | 163 | 1.65E-20  | 79.50% | F:binding; P:metabolic process; F:catalytic activity; P:biological_process                    | 4 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)  |
| 1035 | DMPC15197739_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor                | 109 | 6.20E-53  | 69.50% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1036 | DMPC15197740_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor                     | 134 | 3.32E-12  | 73.80% | -   | 0 | IPR024509; IPR024716  |
| 1037 | DMPC15197932_Speleonectes_tulumensis_0 | cathepsin b  | 273 | 1.86E-98  | 82.40% | P:protein metabolic process; P:catabolic process; P:biological_process; F:peptidase activity  | 4 | IPR000668; IPR013128; IPR015643; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1038 | DMPC15198045_Speleonectes_tulumensis_2 | hypothetical protein BRAFLDRAFT_123613             | 168 | 1.11E-26  | 65.80% | F:catalytic activity; P:metabolic process; P:primary metabolic process                        | 3 | IPR000945; IPR005018; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1039 | DMPC15198058_Speleonectes_tulumensis_0 | low quality protein: calreticulin-like             | 127 | 1.19E-46  | 85.40% | -   | 0 | IPR001580; IPR008985; IPR009033; PTHR11073:SF2 (PANTHER)  |
| 1040 | DMPC15198119_Speleonectes_tulumensis_0 | serine 27 precursor                                | 141 | 2.45E-12  | 63.10% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 1041 | DMPC15198204_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                | 92  | 8.16E-51  | 71.00% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1042 | DMPC15198256_Speleonectes_tulumensis_0 | bone morphogenetic protein 7                       | 116 | 5.62E-10  | 54.30% | F:growth factor activity; P:growth; C:extracellular region                                    | 3 | IPR015615; PTHR11848:SF55 (PANTHER)   |

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|------|--|--|-----|----------|--------|--|---|--|
| 1043 | DMPC15198322_Speleonectes_tulumensis_1 | serine protease inhibitor kazal-type 6-like                      | 106 | 1.35E-08 | 63.75% | -  | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1044 | DMPC15198418_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4                         | 132 | 1.44E-16 | 56.20% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)           |
| 1045 | DMPC15198621_Speleonectes_tulumensis_2 | chitinase partial  | 191 | 5.12E-42 | 67.00% | -  | 0 | IPR001223; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)  |
| 1046 | DMPC15198663_Speleonectes_tulumensis_1 | nidogen 1  | 122 | 4.81E-09 | 64.10% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1047 | DMPC15198677_Speleonectes_tulumensis_2 | secreted ferritin g subunit                                      | 210 | 5.10E-17 | 57.80% | P:oxidation-reduction process; P:cellular iron ion homeostasis; F:oxidoreductase activity; F:transition metal ion binding; F:ferric iron binding; P:iron ion transport               | 6 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; PTHR11431:SF2 (PANTHER), tmhmm (TMHMM)  |
| 1048 | DMPC15198683_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like                  | 137 | 3.21E-09 | 52.90% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1049 | DMPC15198702_Speleonectes_tulumensis_2 | fasciclin ii transmembrane isoform                               | 269 | 7.22E-08 | 52.25% | -  | 0 | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; PTHR19831 (PANTHER), tmhmm (TMHMM), SSF48726 (SUPERFAMILY)  |
| 1050 | DMPC15198730_Speleonectes_tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase             | 158 | 1.94E-32 | 60.10% | -  | 0 | IPR004911; PTHR13234:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1051 | DMPC15198749_Speleonectes_tulumensis_1 | vitellogenin 1   | 110 | 6.72E-17 | 56.50% | -  | 0 | IPR001846; PTHR11339 (PANTHER)   |
| 1052 | DMPC15198771_Speleonectes_tulumensis_0 | ame: full=carboxypeptidase b                                     | 160 | 1.04E-20 | 52.60% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion binding   | 4 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                                     |
| 1053 | DMPC15198800_Speleonectes_tulumensis_1 | folate receptor alpha precursor                                  | 118 | 8.56E-17 | 81.80% | F:receptor activity  | 1 | IPR004269; IPR018143; PTHR10517:SF3 (PANTHER)  |
| 1054 | DMPC15198880_Speleonectes_tulumensis_1 | n-acetylglucosamine-1-phosphotransferase subunit gamma precursor | 113 | 1.67E-15 | 68.80% | F:transferase activity   | 1 | PTHR12630 (PANTHER), PTHR12630:SF2 (PANTHER), PF13015 (PFAM)   |
| 1055 | DMPC15198883_Speleonectes_tulumensis_1 | ---NA---   | 124 |          |        | -  | 0 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP)  |
| 1056 | DMPC15198932_Speleonectes_tulumensis_4 | trypsin  | 157 | 4.91E-11 | 72.90% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1057 | DMPC15199040_Speleonectes_tulumensis_1 | serine protease  | 149 | 7.82E-15 | 62.90% | P:proteolysis; F:peptidase activity; F:metalloendopeptidase activity; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding | 6 | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1058 | DMPC15199144_Speleonectes_tulumensis_0 | prolyl 3-hydroxylase 2-like                                      | 132 | 1.11E-19 | 82.30% | F:binding; F:catalytic activity; P:metabolic process   | 3 | PTHR14049 (PANTHER), PTHR14049:SF1 (PANTHER)   |
| 1059 | DMPC15199174_Speleonectes_tulumensis_1 | loc495415 protein  | 180 | 9.64E-56 | 69.60% | C:extracellular region   | 1 | IPR001283; IPR014044; IPR018244  |
| 1060 | DMPC15199238_Speleonectes_tulumensis_0 | trypsin  | 171 | 3.76E-29 | 62.00% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)   |

|      |  |   |     |           |        |  |    |   |
|------|--|---|-----|-----------|--------|--|----|---|
| 1061 | DMPC15199255_Speleonectes_tulumensis_0 | 60s ribosomal protein l40                       | 149 | 5.49E-46  | 97.30% | F:peptidase activity; P:cell cycle; F:protein binding; P:cellular protein modification process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; F:catalytic activity; P:protein transport; ; C:endosome; F:nucleotide binding; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport | 30 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)    |
| 1062 | DMPC15199256_Speleonectes_tulumensis_2 | iron zinc purple acid phosphatase-like          | 208 | 4.53E-101 | 81.50% | F:binding; F:hydrolase activity  | 2  | IPR004843; IPR025733; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), SSF56300 (SUPERFAMILY) |
| 1063 | DMPC15199287_Speleonectes_tulumensis_1 | ---NA---  | 148 |           |        | -  | 0  | IPR008197; PTHR19441 (PANTHER)  |
| 1064 | DMPC15199438_Speleonectes_tulumensis_1 | apolipophorin, putative                         | 368 | 1.37E-24  | 50.80% | P:lipid transport; F:lipid transporter activity  | 2  | tmhmm (TMHMM)   |
| 1065 | DMPC15199471_Speleonectes_tulumensis_0 | peptidyl-prolyl cis-trans isomerase e           | 212 | 1.39E-10  | 81.70% | -  | 0  | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF72 (PANTHER)                                  |
| 1066 | DMPC15199540_Speleonectes_tulumensis_0 | niemann-pick type c2                            | 130 | 2.68E-14  | 59.50% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNAIP), tmhmm (TMHMM)                                   |
| 1067 | DMPC15199544_Speleonectes_tulumensis_1 | muscle-specific protein 20                      | 137 | 3.77E-48  | 75.60% | -  | 0  | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER)  |
| 1068 | DMPC15199585_Speleonectes_tulumensis_0 | ---NA---  | 128 |           |        | -  | 0  | IPR002119; IPR009072; PTHR23430 (PANTHER), tmhmm (TMHMM)  |
| 1069 | DMPC15199620_Speleonectes_tulumensis_2 | chymotrypsin-like protease ctrl- partial        | 126 | 4.32E-17  | 57.50% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNAIP) |
| 1070 | DMPC15199725_Speleonectes_tulumensis_1 | seminal fluid protein isoform a                 | 154 | 9.86E-13  | 50.60% | F:carbohydrate binding; P:multicellular organism reproduction; C:extracellular space   | 3  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNAIP), tmhmm (TMHMM)                        |
| 1071 | DMPC15199750_Speleonectes_tulumensis_2 | ankyrin repeat domain-containing                | 119 | 6.52E-38  | 74.00% | F:hydrolase activity   | 1  | IPR002110; IPR020683; PTHR24123 (PANTHER)   |
| 1072 | DMPC15199758_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                  | 156 | 3.66E-30  | 67.10% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNAIP)   |
| 1073 | DMPC15199796_Speleonectes_tulumensis_1 | ---NA---  | 487 |           |        | -  | 0  | IPR006207; tmhmm (TMHMM)  |
| 1074 | DMPC15199926_Speleonectes_tulumensis_0 | coatomer alpha                                  | 169 | 2.43E-35  | 76.40% | P:transport; C:Golgi apparatus; C:protein complex; C:cytoplasmic membrane-bounded vesicle; F:protein kinase activity; P:cellular protein modification process; P:organelle organization; F:transferase activity; P:protein transport; F:structural molecule activity   | 10 | IPR010714; PTHR19876 (PANTHER)  |
| 1075 | DMPC15199948_Speleonectes_tulumensis_2 | deformed epidermal autoregulatory factor 1-like | 148 | 2.33E-19  | 54.20% | F:DNA binding  | 1  | IPR000770; IPR010919; IPR024119; PTHR10237:SF0 (PANTHER)  |
| 1076 | DMPC15199961_Speleonectes_tulumensis_1 | ---NA---  | 124 |           |        | -  | 0  | IPR020234; SignalP-NN(euk) (SIGNAIP), tmhmm (TMHMM)   |

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|------|--|---|-----|-----------|--------|---|----|--|
| 1077 | DMPC15199980_Speleonectes_tulumensis_1 | wingless-type mmtv integration site member 8 precursor    | 142 | 4.42E-17  | 63.10% | F:receptor binding; P:multicellular organismal development; P:Wnt receptor signaling pathway; C:proteinaceous extracellular matrix; C:extracellular region  | 5  | IPR005817; tmhmm (TMHMM)   |
| 1078 | DMPC15199993_Speleonectes_tulumensis_1 | trypsinogen 2   | 209 | 1.61E-40  | 65.70% | -   | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)                         |
| 1079 | DMPC15200012_Speleonectes_tulumensis_0 | beta lysosomal variant                                    | 300 | 3.18E-45  | 58.30% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity  | 4  | IPR013781; IPR017853; PTHR10066 (PANTHER), PTHR10066:SF12 (PANTHER)  |
| 1080 | DMPC15200146_Speleonectes_tulumensis_1 | dermatopontin 3   | 101 | 3.01E-07  | 58.00% | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1081 | DMPC15200173_Speleonectes_tulumensis_0 | low affinity immunoglobulin epsilon fc receptor           | 134 | 3.40E-14  | 52.80% | -   | 0  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER)   |
| 1082 | DMPC15200280_Speleonectes_tulumensis_1 | si:dkey- protein  | 124 | 4.73E-10  | 60.10% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1083 | DMPC15200367_Speleonectes_tulumensis_0 | myosin heavy chain  | 517 | 2.38E-161 | 91.10% | C:cytoskeleton; C:protein complex; F:motor activity   | 3  | IPR002928; IPR009053; PTHR13140 (PANTHER), PTHR13140:SF106 (PANTHER), SignalP-NN(euk) (SIGNALP)                    |
| 1084 | DMPC15200438_Speleonectes_tulumensis_0 | anopheles stephensi ubiquitin                             | 133 | 1.82E-60  | 98.20% | C:cytoskeleton; C:protein complex; F:structural molecule activity; C:lipid particle; P:cellular protein modification process; P:protein metabolic process; P:catabolic process; C:ribosome; C:cytosol; P:translation  | 10 | IPR000626; IPR001975; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 1085 | DMPC15200513_Speleonectes_tulumensis_0 | metalloprotease   | 155 | 1.15E-07  | 58.22% | P:proteolysis; F:metallopeptidase activity; F:peptidase activity; F:metalloendopeptidase activity   | 4  | no IPS match   |
| 1086 | DMPC15200625_Speleonectes_tulumensis_1 | PREDICTED: hypothetical protein LOC100122506              | 125 | 9.98E-21  | 63.10% | -   | 0  | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR11324 (PANTHER)  |
| 1087 | DMPC15200723_Speleonectes_tulumensis_2 | cysteine proteinase inhibitor precursor                   | 115 | 7.62E-32  | 87.50% | F:enzyme regulator activity; P:protein metabolic process; P:catabolic process; F:peptidase activity   | 4  | IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF43 (PANTHER), SSF54001 (SUPERFAMILY)       |
| 1088 | DMPC15200833_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like           | 126 | 2.74E-13  | 58.70% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1089 | DMPC15200856_Speleonectes_tulumensis_1 | plasma kallikrein   | 174 | 6.77E-19  | 58.40% | F:catalytic activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER)                                    |
| 1090 | DMPC15200858_Speleonectes_tulumensis_1 | 26s proteasome non-atpase regulatory subunit 10 isoform 2 | 119 | 4.56E-34  | 69.30% | P:viral reproduction; P:cell cycle; P:metabolic process; P:regulation of biological process; C:protein complex; C:intracellular; P:biological_process; P:signal transduction; P:cell death; P:mitochondrion organization; C:cytoskeleton; ; P:response to stress; C:cytosol; C:nucleoplasm; F:protein binding; P:protein metabolic process; P:catabolic process; ; P:cell growth; P:cellular component organization; P:nucleobase-containing compound metabolic process; P:protein transport; P:cellular protein modification process | 24 | IPR002110; IPR020683; PTHR24199 (PANTHER), PTHR24199:SF0 (PANTHER)   |
| 1091 | DMPC15200914_Speleonectes_tulumensis_2 | upf0670 protein cg4666-like                               | 222 | 5.20E-31  | 54.60% | -   | 0  | G3DSA:3.10.129.10 (GENE3D), PTHR12475 (PANTHER), PF13279 (PFAM), tmhmm (TMHMM), SSF54637 (SUPERFAMILY)             |
| 1092 | DMPC15200952_Speleonectes_tulumensis_0 | serine protease   | 161 | 1.85E-12  | 68.30% | F:peptidase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)                                    |

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|------|--|--|-----|-----------|--------|--|----|--|
| 1093 | DMPC15200961_Speleonectes_tulumensis_1 | chitinase 2                                    | 151 | 1.75E-20  | 66.70% | P:carbohydrate metabolic process; F:hydrolase activity   | 2  | IPR001223; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1094 | DMPC15200995_Speleonectes_tulumensis_1 | immunoglobulin i-set domain containing protein | 146 | 8.45E-11  | 56.30% | F:hydrolase activity   | 1  | IPR007110; IPR013098; IPR013783; IPR020675; SSF48726 (SUPERFAMILY)   |
| 1095 | DMPC15201008_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor            | 142 | 9.21E-35  | 72.00% | -  | 0  | IPR005203; IPR013788; IPR014756; SignalP-NN(euk) (SIGNALP)   |
| 1096 | DMPC15201018_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor            | 116 | 2.04E-39  | 70.20% | -  | 0  | IPR005203; IPR013788; IPR014756; PTHR11511:SF4 (PANTHER)   |
| 1097 | DMPC15201047_Speleonectes_tulumensis_2 | ---NA---                                       | 189 |           |        | -  | 0  | IPR000998; IPR008985; PTHR23282 (PANTHER)  |
| 1098 | DMPC15201073_Speleonectes_tulumensis_2 | heat shock 70 kda protein                      | 402 | 6.42E-126 | 92.80% | P:protein metabolic process; F:catalytic activity; F:protein binding; F:nucleotide binding; P:response to stress; P:metabolic process  | 6  | IPR013126; G3DSA:1.20.1270.10 (GENE3D), G3DSA:2.60.34.10 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), tmhmm (TMHMM), SSF100920 (SUPERFAMILY), SSF100934 (SUPERFAMILY) |
| 1099 | DMPC15201214_Speleonectes_tulumensis_1 | oocyte protease inhibitor-1 precursor          | 86  | 5.14E-11  | 65.30% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), PTHR12352:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1100 | DMPC15201287_Speleonectes_tulumensis_1 | thioredoxin peroxidase                         | 221 | 1.50E-41  | 95.10% | P:metabolic process; F:antioxidant activity; F:catalytic activity  | 3  | IPR012336; IPR019479; G3DSA:3.30.1020.10 (GENE3D), PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER)   |
| 1101 | DMPC15201385_Speleonectes_tulumensis_0 | sifa preprohormone                             | 116 | 1.14E-17  | 74.50% | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1102 | DMPC15201393_Speleonectes_tulumensis_1 | vitellogenin 1                                 | 95  | 4.11E-16  | 57.78% | -  | 0  | IPR001846  |
| 1103 | DMPC15201401_Speleonectes_tulumensis_1 | ferritin                                       | 117 | 8.18E-39  | 78.30% | -  | 0  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1104 | DMPC15201422_Speleonectes_tulumensis_1 | group iii secreted phospholipase               | 301 | 4.31E-34  | 47.70% | P:phospholipase A2 activity; P:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; F:hydrolase activity  | 5  | IPR001211; IPR016090   |
| 1105 | DMPC15201518_Speleonectes_tulumensis_0 | saposin-related protein                        | 191 | 3.75E-60  | 78.50% | C:lysosome; P:lipid metabolic process  | 2  | IPR003119; IPR007856; IPR008138; IPR008139; IPR008373; IPR011001; PTHR11480 (PANTHER), PTHR11480:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                         |
| 1106 | DMPC15201627_Speleonectes_tulumensis_2 | ankyrin isoform x                              | 214 | 4.49E-72  | 91.00% | F:cytoskeletal protein binding; P:anatomical structure morphogenesis; P:cellular component organization; P:cell differentiation; P:multicellular organismal development; P:cytoskeleton organization; C:cell; C:cellular_component; P:signal transduction; P:cellular homeostasis; F:structural molecule activity; C:plasma membrane | 12 | IPR002110; IPR020683; PTHR24123 (PANTHER), PTHR24123:SF0 (PANTHER), PF13637 (PFAM)   |
| 1107 | DMPC15201637_Speleonectes_tulumensis_0 | apolipoprotein d                               | 277 | 1.39E-32  | 56.30% | F:lipid binding; P:transport; F:transporter activity   | 3  | IPR000566; IPR003057; IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER)   |
| 1108 | DMPC15201786_Speleonectes_tulumensis_1 | cysteine-rich with egf-like domain protein 1   | 96  | 1.01E-25  | 66.40% | F:calcium ion binding  | 1  | IPR006212; IPR009030; G3DSA:2.10.220.10 (GENE3D), PTHR24838 (PANTHER), PTHR24838:SF29 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1109 | DMPC15201820_Speleonectes_tulumensis_1 | protein  | 139 | 1.41E-19  | 52.90% | P:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1110 | DMPC15201842_Speleonectes_tulumensis_2 | protein disulfide isomerase                    | 231 | 6.62E-44  | 57.60% | F:catalytic activity   | 1  | IPR012336; IPR013766; PTHR18929 (PANTHER), PTHR18929:SF32 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

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|------|--|---|-----|----------|--------|--|----|--|
| 1111 | DMPC15201883_Speleonectes tulumensis_0 | dermatopontin 3                                     | 216 | 2.42E-38 | 59.90% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1112 | DMPC15202148_Speleonectes tulumensis_2 | trypsin 3   | 230 | 1.56E-80 | 73.30% | -  | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 1113 | DMPC15202254_Speleonectes tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor     | 128 | 9.84E-08 | 46.67% | -  | 0  | IPR000716; IPR022339; PTHR14093:SF3 (PANTHER)  |
| 1114 | DMPC15202321_Speleonectes tulumensis_2 | cathepsin 1   | 269 | 3.52E-83 | 69.10% | P:proteolysis; F:cysteine-type peptidase activity  | 2  | IPR000169; IPR000668; IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1115 | DMPC15202335_Speleonectes tulumensis_0 | group 3 secretory phospholipase a2                  | 189 | 2.44E-54 | 64.00% | F:phospholipase A2 activity; F:calcium ion binding; P:lipid catabolic process  | 3  | IPR001211; IPR016090; PTHR12253:SF5 (PANTHER)  |
| 1116 | DMPC15202409_Speleonectes tulumensis_0 | isoform a   | 169 | 6.74E-20 | 53.10% | F:hydrolase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)   |
| 1117 | DMPC15202471_Speleonectes tulumensis_1 | pacifastin-related peptide precursor                | 131 | 7.04E-07 | 61.00% | -  | 0  | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1118 | DMPC15202579_Speleonectes tulumensis_0 | fertilization envelope outer layer protein          | 252 | 1.24E-14 | 55.00% | -  | 0  | IPR000152; IPR000742; IPR005515; IPR013032; IPR020864; IPR023413; IPR024731; PTHR18841:SF0 (PANTHER), SSF57196 (SUPERFAMILY)                                       |
| 1119 | DMPC15202674_Speleonectes tulumensis_2 | thioredoxin domain-containing protein 1             | 420 | 3.06E-54 | 83.40% | C:cytoplasm; P:anatomical structure morphogenesis; P:regulation of biological process; P:growth; P:behavior; P:reproduction; P:cellular homeostasis; P:cellular protein modification process; P:biological_process; F:catalytic activity; C:cell | 11 | IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1120 | DMPC15202735_Speleonectes tulumensis_1 | mitochondrial manganese superoxide dismutase        | 109 | 3.17E-13 | 81.70% | -  | 0  | IPR001189; IPR019831; PTHR11404:SF5 (PANTHER)  |
| 1121 | DMPC15202765_Speleonectes tulumensis_0 | venom allergen 5                                    | 107 | 8.06E-14 | 66.00% | -  | 0  | IPR001283; IPR014044   |
| 1122 | DMPC15202791_Speleonectes tulumensis_2 | dnak protein  | 244 | 5.59E-99 | 83.60% | F:nucleotide binding; P:response to stress   | 2  | IPR013126; G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF100920 (SUPERFAMILY), SSF53067 (SUPERFAMILY)    |
| 1123 | DMPC15202815_Speleonectes tulumensis_1 | peritrophic membrane protein 2                      | 171 | 1.51E-10 | 57.50% | P:metabolic process; F:catalytic activity  | 2  | IPR002557; PTHR23301 (PANTHER)   |
| 1124 | DMPC15202850_Speleonectes tulumensis_0 | early growth response                               | 374 | 3.94E-89 | 65.30% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR10042 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)   |
| 1125 | DMPC15202861_Speleonectes tulumensis_0 | calreticulin  | 125 | 1.03E-59 | 91.10% | P:protein metabolic process; C:endoplasmic reticulum; F:carbohydrate binding; F:calcium ion binding; F:protein binding   | 5  | IPR001580; IPR008985; IPR013320; IPR018124   |
| 1126 | DMPC15202868_Speleonectes tulumensis_0 | h-2 class ii histocompatibility antigen gamma chain | 103 | 3.56E-08 | 65.80% | P:multicellular organismal development   | 1  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER)  |
| 1127 | DMPC15202906_Speleonectes tulumensis_2 | apolipoprotein o-like                               | 325 | 3.05E-18 | 55.20% | -  | 0  | IPR019166; PTHR14564 (PANTHER), PTHR14564:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1128 | DMPC15202917_Speleonectes tulumensis_1 | pacifastin light chain                              | 394 | 1.73E-15 | 50.50% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity  | 2  | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1129 | DMPC15202972_Speleonectes tulumensis_0 | chymotrypsin-like protease ctrl- partial            | 116 | 1.20E-14 | 59.40% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1130 | DMPC15203130_Speleonectes tulumensis_4 | prophenol oxidase a1                                | 99  | 2.94E-17 | 80.70% | F:catalytic activity; P:metabolic process  | 2  | IPR000896; IPR008922; IPR013788; PTHR11511:SF4 (PANTHER)   |



|      |  |   |     |          |        |  |    |   |
|------|--|---|-----|----------|--------|--|----|---|
| 1131 | DMPC15203147_Speleonectes_tulumensis_0 | predicted protein                               | 363 | 2.76E-07 | 44.00% | P:proteolysis; F:serine-type endopeptidase activity; F:serine-type peptidase activity; F:hydrolase activity; F:catalytic activity; F:peptidase activity  | 6  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D)   |
| 1132 | DMPC15203182_Speleonectes_tulumensis_2 | secreted frizzled-related protein 4             | 168 | 2.47E-21 | 53.80% | P:metabolic process; P:multicellular organismal development; P:transport; P:regulation of biological process; P:signal transduction; C:extracellular region; C:intracellular; P:cellular component organization; P:cell differentiation; P:response to endogenous stimulus   | 10 | IPR015526; IPR020067; IPR026556   |
| 1133 | DMPC15203191_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like | 138 | 1.89E-22 | 61.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1134 | DMPC15203197_Speleonectes_tulumensis_1 | mam-containing astacin-like metalloprotease     | 130 | 6.98E-07 | 48.00% | -  | 0  | IPR001506; IPR024079; PTHR10127 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)                                   |
| 1135 | DMPC15203234_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 136 | 8.75E-11 | 60.00% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1136 | DMPC15203259_Speleonectes_tulumensis_1 | serine protease                                 | 129 | 1.08E-19 | 68.90% | F:hydrolase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24252 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 1137 | DMPC15203296_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor | 112 | 1.29E-10 | 56.50% | P:proteolysis; F:peptidase activity; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 6  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1138 | DMPC15203384_Speleonectes_tulumensis_1 | ---NA---  | 144 |          |        | -  | 0  | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1139 | DMPC15203398_Speleonectes_tulumensis_0 | chorion peroxidase                              | 121 | 6.08E-20 | 63.90% | P:oxidation-reduction process; F:heme binding; F:oxidoreductase activity; P:response to oxidative stress; F:peroxidase activity  | 5  | IPR002007; IPR010255; PTHR11475 (PANTHER)   |
| 1140 | DMPC15203413_Speleonectes_tulumensis_2 | phospholipase a2                                | 132 | 9.65E-20 | 64.50% | F:hydrolase activity; P:lipid metabolic process  | 2  | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP)  |
| 1141 | DMPC15203568_Speleonectes_tulumensis_1 | 60s ribosomal protein l40                       | 132 | 1.03E-42 | 94.40% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:cellular protein modification process; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport | 27 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 1142 | DMPC15203595_Speleonectes_tulumensis_1 | isoform c                                       | 97  | 2.69E-49 | 96.60% | P:protein metabolic process; P:catabolic process; F:peptidase activity; C:plasma membrane  | 4  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24258 (PANTHER), PTHR24258:SF3 (PANTHER)   |
| 1143 | DMPC15203661_Speleonectes_tulumensis_1 | anopheles stephensi ubiquitin                   | 134 | 2.97E-80 | 96.50% | C:cytoskeleton; C:protein complex; F:structural molecule activity; C:lipid particle; P:cellular protein modification process; P:protein metabolic process; P:catabolic process; C:ribosome; C:cytosol; P:translation   | 10 | IPR000626; IPR001975; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                 |

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|------|--|--|-----|----------|--------|---|----|--|
| 1144 | DMPC15203713_Speleonectes_tulumensis_1 | cyclophilin 1                              | 132 | 1.20E-38 | 85.80% | C:cytosol; C:cytoskeleton; C:protein complex; P:cellular protein modification process; P:protein metabolic process; F:enzyme regulator activity; P:anatomical structure morphogenesis; P:multicellular organismal development; P:cell death; C:nucleus; F:catalytic activity; C:nucleoplasm | 12 | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1145 | DMPC15203722_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_315125     | 153 | 4.28E-09 | 50.50% | -   | 0  | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1146 | DMPC15203781_Speleonectes_tulumensis_1 | lectin e                                   | 152 | 1.15E-08 | 59.00% | -   | 0  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER)   |
| 1147 | DMPC15203812_Speleonectes_tulumensis_2 | isoform a                                  | 198 | 1.22E-25 | 57.20% | F:peptidase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)  |
| 1148 | DMPC15203872_Speleonectes_tulumensis_0 | trypsinogen 2                              | 104 | 1.58E-24 | 67.60% | -   | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1149 | DMPC15204079_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor | 107 | 3.96E-08 | 59.40% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1150 | DMPC15204127_Speleonectes_tulumensis_1 | dermatopontin 2                            | 139 | 7.64E-18 | 60.30% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1151 | DMPC15204163_Speleonectes_tulumensis_1 | peptidase s8 and sedolisin                 | 170 | 1.54E-22 | 68.50% | F:peptidase activity  | 1  | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1152 | DMPC15204200_Speleonectes_tulumensis_0 | zinc finger                                | 119 | 1.09E-19 | 64.60% | F:nucleic acid binding; F:zinc ion binding; C:intracellular   | 3  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), PF13894 (PFAM), SSF57667 (SUPERFAMILY)   |
| 1153 | DMPC15204207_Speleonectes_tulumensis_2 | glutaminy-peptide cyclotransferase         | 118 | 4.79E-35 | 71.00% | P:proteolysis; F:peptidase activity   | 2  | IPR007484; G3DSA:3.40.630.10 (GENE3D), PTHR12283 (PANTHER), PTHR12283:SF0 (PANTHER), SSF53187 (SUPERFAMILY)  |
| 1154 | DMPC15204375_Speleonectes_tulumensis_2 | protein lec- isoform b                     | 306 | 9.58E-31 | 52.00% | F:binding   | 1  | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)   |
| 1155 | DMPC15204408_Speleonectes_tulumensis_1 | subfamily member 9                         | 142 | 8.61E-42 | 80.70% | P:protein metabolic process; F:protein binding  | 2  | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF16 (PANTHER)  |
| 1156 | DMPC15204492_Speleonectes_tulumensis_0 | pancreatic triacylglycerol lipase-like     | 260 | 1.81E-59 | 59.70% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; F:triglyceride lipase activity; C:extracellular region   | 5  | IPR000734; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)  |
| 1157 | DMPC15204499_Speleonectes_tulumensis_1 | anti-lipopolsaccharide factor isoform 7    | 144 | 1.34E-21 | 67.60% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1158 | DMPC15204519_Speleonectes_tulumensis_2 | nucleobindin 1                             | 171 | 2.77E-35 | 67.40% | -   | 0  | PTHR19237 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1159 | DMPC15204534_Speleonectes_tulumensis_1 | ecdysteroid-regulated protein              | 153 | 2.58E-26 | 58.10% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1160 | DMPC15204565_Speleonectes_tulumensis_2 | dnak protein                               | 188 | 9.53E-17 | 84.50% | P:protein metabolic process; F:protein binding; F:nucleotide binding  | 3  | IPR013126; IPR018181; G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53067 (SUPERFAMILY) |
| 1161 | DMPC15204578_Speleonectes_tulumensis_2 | g-protein coupled receptor mth2-like       | 283 | 6.63E-41 | 58.20% | F:transmembrane signaling receptor activity; F:receptor activity; C:integral to membrane; F:G-protein coupled receptor activity; C:membrane; P:cell surface receptor signaling pathway; P:G-protein coupled receptor signaling pathway  | 7  | IPR000832; IPR017981; PTHR12011 (PANTHER), PTHR12011:SF12 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1162 | DMPC15204727_Speleonectes_tulumensis_2 | annexin x                                  | 158 | 3.36E-25 | 80.80% | F:calcium ion binding; F:lipid binding  | 2  | IPR001464; IPR018252; IPR018502; tmhmm (TMHMM)   |

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|------|--|---|-----|-----------|--------|---|---|---|
| 1163 | DMPC15204768_Speleonectes_tulumensis_2 | carboxypeptidase b-like                                 | 169 | 1.46E-45  | 64.50% | -   | 0 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                          |
| 1164 | DMPC15204769_Speleonectes_tulumensis_1 | ame: full=conoporin-cn1 flags: precursor                | 127 | 6.18E-14  | 56.00% | -   | 0 | IPR015926   |
| 1165 | DMPC15204845_Speleonectes_tulumensis_0 | ferritin-1 heavy chain                                  | 91  | 1.02E-19  | 91.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1166 | DMPC15204917_Speleonectes_tulumensis_0 | ubiquitin ribosomal protein s27a fusion protein         | 157 | 2.71E-70  | 96.90% | -   | 0 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                         |
| 1167 | DMPC15205076_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor                     | 180 | 5.49E-121 | 71.00% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1168 | DMPC15205089_Speleonectes_tulumensis_2 | niemann-pick type c2                                    | 122 | 2.45E-25  | 57.60% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 1169 | DMPC15205307_Speleonectes_tulumensis_1 | si:dkey- protein  | 120 | 1.78E-13  | 57.90% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1170 | DMPC15205316_Speleonectes_tulumensis_2 | hemocyanin subunit 1                                    | 155 | 2.02E-38  | 68.80% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1171 | DMPC15205361_Speleonectes_tulumensis_4 | apolipoprotein a-i-binding                              | 98  | 1.55E-30  | 76.20% | F:binding; F:catalytic activity; F:nucleotide binding   | 3 | IPR004443; PTHR13232 (PANTHER)  |
| 1172 | DMPC15205374_Speleonectes_tulumensis_2 | protein disulfide-isomerase a6-like                     | 153 | 6.04E-48  | 81.00% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process  | 5 | IPR005746; IPR005788; IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER)  |
| 1173 | DMPC15205380_Speleonectes_tulumensis_0 | glutathione peroxidase 4 (phospholipid hydroperoxidase) | 378 | 2.81E-33  | 82.50% | P:response to stress; P:lipid metabolic process; P:multicellular organismal development; F:catalytic activity; F:antioxidant activity; C:mitochondrion; P:metabolic process | 7 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)   |
| 1174 | DMPC15205622_Speleonectes_tulumensis_1 | plasminogen activator spa                               | 137 | 1.54E-18  | 56.50% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24250 (PANTHER), SignalP-NN(euk) (SIGNALP)                                 |
| 1175 | DMPC15205653_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4                | 113 | 2.77E-12  | 55.60% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1176 | DMPC15205673_Speleonectes_tulumensis_2 | angiotensin-converting enzyme-like                      | 231 | 1.39E-41  | 68.90% | -   | 0 | IPR001548; IPR002000; PTHR10514:SF16 (PANTHER), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)   |
| 1177 | DMPC15205704_Speleonectes_tulumensis_1 | mhc class ii-associated invariant chain                 | 116 | 3.64E-08  | 67.00% | P:multicellular organismal development  | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1178 | DMPC15205735_Speleonectes_tulumensis_2 | angiotensin converting enzyme                           | 130 | 6.59E-45  | 76.70% | -   | 0 | IPR001548; PTHR10514:SF16 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)  |
| 1179 | DMPC15205911_Speleonectes_tulumensis_1 | serine protease 56-like                                 | 252 | 7.14E-10  | 50.50% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24261 (PANTHER), PTHR24261:SF9 (PANTHER)   |
| 1180 | DMPC15205922_Speleonectes_tulumensis_0 | pancreatic triacylglycerol lipase-like                  | 141 | 1.85E-10  | 58.10% | P:lipid metabolic process; F:hydrolase activity; F:catalytic activity; C:extracellular region   | 4 | IPR000734; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 1181 | DMPC15205978_Speleonectes_tulumensis_5 | ---NA---  | 270 |           |        | -   | 0 | no IPS match  |
| 1182 | DMPC15205989_Speleonectes_tulumensis_0 | sifa preprohormone                                      | 154 | 2.10E-17  | 74.50% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1183 | DMPC15205992_Speleonectes_tulumensis_2 | urokinase-type plasminogen activator precursor          | 150 | 1.46E-07  | 68.50% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1184 | DMPC15205994_Speleonectes_tulumensis_1 | ---NA---  | 128 |           |        | -   | 0 | IPR000010; G3DSA:3.10.450.10 (GENE3D), SignalP-NN(euk) (SIGNALP), SSF54403 (SUPERFAMILY)  |

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| 1185 | DMPC15206045_Speleonectes_tulumensis_1 | 60s ribosomal protein l40                      | 122 | 5.02E-42 | 96.70% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                  |
| 1186 | DMPC15206124_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase       | 124 | 4.59E-38 | 93.20% | -  | 0  | IPR016040; IPR020828; IPR020829; IPR020830; IPR020831; G3DSA:3.30.360.10 (GENE3D), tmhmm (TMHMM), SSF51735 (SUPERFAMILY) |
| 1187 | DMPC15206248_Speleonectes_tulumensis_1 | anti-lipoplysaccharide factor isoform 7        | 136 | 5.62E-18 | 65.10% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1188 | DMPC15206289_Speleonectes_tulumensis_1 | fibrinolytic enzyme                            | 125 | 2.02E-16 | 59.20% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)    |
| 1189 | DMPC15206304_Speleonectes_tulumensis_1 | soma ferritin                                  | 106 | 6.98E-23 | 87.30% | -  | 0  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1190 | DMPC15206313_Speleonectes_tulumensis_2 | glutathione peroxidase                         | 150 | 2.41E-18 | 86.60% | -  | 0  | IPR000889; IPR012336; tmhmm (TMHMM)  |
| 1191 | DMPC15206345_Speleonectes_tulumensis_1 | suppressor of tumorigenicity protein 14        | 302 | 5.94E-39 | 51.80% | F:catalytic activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), G3DSA:4.10.1220.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1192 | DMPC15206400_Speleonectes_tulumensis_1 | copper chaperone for superoxide dismutase      | 138 | 5.31E-55 | 79.20% | -  | 0  | IPR001424; IPR018152; IPR024134  |
| 1193 | DMPC15206401_Speleonectes_tulumensis_0 | selenium-dependent glutathione peroxidase      | 131 | 6.36E-27 | 62.50% | -  | 0  | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1194 | DMPC15206420_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_332702         | 199 | 1.20E-49 | 64.80% | -  | 0  | IPR015255; IPR015817; IPR015819; PTHR13769 (PANTHER)   |
| 1195 | DMPC15206429_Speleonectes_tulumensis_2 | trypsin 3                                      | 125 | 2.38E-35 | 75.90% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1196 | DMPC15206441_Speleonectes_tulumensis_1 | peptidyl-glycine alpha-amidating monooxygenase | 230 | 8.09E-17 | 61.20% | F:peptidylglycine monooxygenase activity; P:oxidation-reduction process; P:peptide metabolic process; F:copper ion binding; C:membrane; F:monooxygenase activity   | 6  | IPR011042; PTHR10680 (PANTHER), PTHR10680:SF11 (PANTHER)   |
| 1197 | DMPC15206443_Speleonectes_tulumensis_2 | dermatopontin 3                                | 135 | 2.18E-09 | 63.78% | -  | 0  | IPR026645; tmhmm (TMHMM)   |
| 1198 | DMPC15206479_Speleonectes_tulumensis_0 | midogen 1                                      | 78  | 1.40E-10 | 65.90% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1199 | DMPC15206554_Speleonectes_tulumensis_1 | carboxypeptidase b-like                        | 159 | 5.51E-39 | 78.60% | -  | 0  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)                                       |
| 1200 | DMPC15206585_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_312473         | 151 | 2.36E-08 | 68.67% | -  | 0  | IPR014044; tmhmm (TMHMM)   |
| 1201 | DMPC15206658_Speleonectes_tulumensis_2 | ferritin 3-like protein                        | 145 | 2.27E-22 | 77.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1202 | DMPC15206695_Speleonectes_tulumensis_1 | soma ferritin                                  | 115 | 4.38E-33 | 87.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |

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|------|--|---|-----|----------|--------|---|----|---|
| 1203 | DMPC15206773_Speleonectes_tulumensis_3 | vitellogenin 1                                  | 302 | 1.04E-41 | 53.10% | -   | 0  | IPR001747; IPR011030; PTHR23345 (PANTHER)   |
| 1204 | DMPC15206871_Speleonectes_tulumensis_0 | thioredoxin peroxidase                          | 131 | 9.30E-36 | 80.10% | P:metabolic process; F:catalytic activity; F:antioxidant activity   | 3  | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER), SignalP-NN(euk) (SIGNALP)                          |
| 1205 | DMPC15206884_Speleonectes_tulumensis_3 | dipeptidyl peptidase 4                          | 195 | 4.70E-31 | 75.80% | -   | 0  | G3DSA:2.140.10.30 (GENE3D), PTHR11731 (PANTHER), PTHR11731:SF23 (PANTHER), tmhmm (TMHMM)                                |
| 1206 | DMPC15206979_Speleonectes_tulumensis_1 | endoglycoceramidase-like protein                | 156 | 2.04E-22 | 64.40% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity  | 4  | IPR001547; IPR013781; IPR017853; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1207 | DMPC15207021_Speleonectes_tulumensis_2 | si:dkey- protein                                | 97  | 4.91E-08 | 64.80% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 1208 | DMPC15207092_Speleonectes_tulumensis_0 | serine protease precursor                       | 149 | 4.80E-16 | 58.80% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding   | 4  | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1209 | DMPC15207161_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 178 | 7.36E-30 | 60.50% | -   | 0  | IPR026645   |
| 1210 | DMPC15207163_Speleonectes_tulumensis_2 | aldo-keto reductase                             | 114 | 1.94E-21 | 76.70% | P:oxidation-reduction process; F:oxidoreductase activity; C:cellular_component  | 3  | IPR001395; IPR023210; PTHR11732:SF34 (PANTHER)  |
| 1211 | DMPC15207250_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like | 141 | 2.01E-22 | 59.90% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 1212 | DMPC15207398_Speleonectes_tulumensis_1 | low quality protein: hemicentin-2               | 96  | 7.68E-08 | 55.20% | -   | 0  | IPR007110; IPR013098; IPR013783; PTHR10489 (PANTHER), PTHR10489:SF25 (PANTHER), SSF48726 (SUPERFAMILY)                  |
| 1213 | DMPC15207466_Speleonectes_tulumensis_0 | oocyte protease inhibitor-2 precursor           | 125 | 7.17E-14 | 48.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1214 | DMPC15207498_Speleonectes_tulumensis_2 | peptidyl-prolyl cis-trans isomerase cyp20-3     | 141 | 1.34E-35 | 63.40% | P:regulation of biological process; P:ion transport; P:generation of precursor metabolites and energy; P:response to abiotic stimulus; C:plastid; C:extracellular region; P:biological_process; F:protein binding; P:biosynthetic process; P:protein transport; P:lipid metabolic process; C:ribosome; C:organelle; C:thylakoid; P:carbohydrate metabolic process; P:metabolic process; P:response to stress; P:catabolic process; ; P:secondary metabolic process; P:response to biotic stimulus; P:anatomical structure morphogenesis; P:multicellular organismal development; P:cell differentiation; F:catalytic activity; P:response to endogenous stimulus; ; P:cellular protein modification process; P:nucleobase-containing compound metabolic process | 29 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)  |
| 1215 | DMPC15207540_Speleonectes_tulumensis_0 | apolipoprotein d                                | 119 | 7.26E-16 | 61.30% | -   | 0  | IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1216 | DMPC15207574_Speleonectes_tulumensis_0 | blastula protease 10                            | 152 | 2.61E-08 | 58.40% | -   | 0  | IPR001506; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)  |
| 1217 | DMPC15207606_Speleonectes_tulumensis_2 | ---NA---  | 108 | -        | -      | -   | 0  | SignalP-NN(euk) (SIGNALP)   |

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|------|--|---|-----|----------|--------|--|---|--|
| 1218 | DMPC15207643_Speleonectes_tulumensis_0 | serine carboxypeptidase family protein          | 194 | 7.90E-56 | 64.70% | F:hydrolase activity   | 1 | IPR001563; G3DSA:3.40.50.1820 (GENE3D), PTHR11802:SF6 (PANTHER), SSF53474 (SUPERFAMILY)                                      |
| 1219 | DMPC15207671_Speleonectes_tulumensis_2 | apolipoprotein d-like isoform 1                 | 155 | 1.82E-41 | 63.30% | F:lipid binding; P:transport; F:transporter activity   | 3 | IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                     |
| 1220 | DMPC15207731_Speleonectes_tulumensis_0 | glutathione peroxidase 6                        | 113 | 3.32E-09 | 71.33% | F:catalytic activity; F:antioxidant activity   | 2 | IPR000889; IPR012336   |
| 1221 | DMPC15207750_Speleonectes_tulumensis_1 | saxiphilin precursor                            | 112 | 7.90E-11 | 66.20% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1222 | DMPC15207755_Speleonectes_tulumensis_2 | serine proteinase stubble-like                  | 144 | 8.10E-21 | 63.60% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)   |
| 1223 | DMPC15207759_Speleonectes_tulumensis_1 | egf-like domain-containing                      | 147 | 5.94E-30 | 65.30% | F:catalytic activity   | 1 | IPR000742; IPR013032; G3DSA:2.170.300.10 (GENE3D), PTHR24035 (PANTHER), PTHR24035:SF3 (PANTHER)                              |
| 1224 | DMPC15207788_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like | 137 | 2.58E-15 | 56.60% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1225 | DMPC15207925_Speleonectes_tulumensis_0 | zinc finger protein 235                         | 136 | 1.47E-12 | 54.40% | F:metal ion binding; P:regulation of transcription, DNA-dependent; F:nucleic acid binding; P:biological_process; F:zinc ion binding; C:intracellular region; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 6 | IPR007087; IPR015880; PTHR11389 (PANTHER), PTHR11389:SF378 (PANTHER), PF13465 (PFAM), PF13894 (PFAM), SSF57667 (SUPERFAMILY) |
| 1226 | DMPC15207991_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 126 | 4.91E-15 | 50.20% | -  | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1227 | DMPC15208111_Speleonectes_tulumensis_0 | ---NA---  | 145 | -        | -      | -  | 0 | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1228 | DMPC15208150_Speleonectes_tulumensis_1 | pancreatic lipase related protein 1             | 200 | 2.47E-47 | 63.50% | C:extracellular space; F:binding; P:multicellular organismal development; F:hydrolase activity; P:response to endogenous stimulus; F:protein binding; P:metabolic process  | 7 | IPR000734; IPR002331; IPR013818; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), SSF53474 (SUPERFAMILY)              |
| 1229 | DMPC15208190_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like | 112 | 8.13E-09 | 62.90% | -  | 0 | IPR026645  |
| 1230 | DMPC15208192_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 108 | 1.58E-07 | 58.00% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1231 | DMPC15208217_Speleonectes_tulumensis_2 | PREDICTED: uncharacterized protein LOC100175254 | 524 | 4.91E-10 | 40.00% | -  | 0 | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER), tmhmm (TMHMM)   |
| 1232 | DMPC15208247_Speleonectes_tulumensis_1 | ferritin 3-like protein                         | 122 | 1.00E-23 | 76.40% | F:binding  | 1 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1233 | DMPC15208329_Speleonectes_tulumensis_0 | peroxisomal trans-2-enoyl- reductase-like       | 190 | 1.93E-57 | 74.20% | P:metabolic process; F:catalytic activity  | 2 | IPR002198; IPR002347; IPR016040; PTHR24317 (PANTHER), PTHR24317:SF0 (PANTHER), SSF51735 (SUPERFAMILY)                        |
| 1234 | DMPC15208350_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 148 | 1.31E-21 | 53.30% | F:peptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1235 | DMPC15208430_Speleonectes_tulumensis_2 | serine protease                                 | 161 | 2.45E-11 | 69.90% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 1236 | DMPC15208434_Speleonectes_tulumensis_2 | parkinson disease 7 domain-containing           | 108 | 6.04E-35 | 74.00% | C:extracellular region   | 1 | G3DSA:3.40.50.880 (GENE3D), PTHR31141 (PANTHER)  |
| 1237 | DMPC15208443_Speleonectes_tulumensis_2 | ---NA---  | 42  | -        | -      | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)  |
| 1238 | DMPC15208449_Speleonectes_tulumensis_2 | anti-lipoplysaccharide factor isoform 7         | 149 | 1.13E-25 | 71.90% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1239 | DMPC15208616_Speleonectes_tulumensis_1 | kazal-type serine proteinase inhibitor 4        | 95  | 5.23E-10 | 55.70% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 1240 | DMPC15208690_Speleonectes_tulumensis_2 | 14-3-3 zeta                                     | 114 | 3.21E-16 | 81.70% | -  | 0 | IPR000308; IPR023410; PTHR18860:SF0 (PANTHER)  |

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| 1241 | DMPC15208693_Speleonectes_tulumensis_0 | hla class ii histocompatibility antigen gamma chain-like isoform 2 | 161 | 2.78E-10 | 63.50% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER)  |
| 1242 | DMPC15208702_Speleonectes_tulumensis_2 | pdgf- and vegf-related factor 1-like precursor                     | 197 | 1.66E-37 | 56.90% | F:growth factor activity; P:positive regulation of cell division; C:membrane   | 3  | IPR000072; G3DSA:2.10.90.10 (GENE3D), PTHR11633 (PANTHER), PTHR11633:SF4 (PANTHER), SSF57501 (SUPERFAMILY)  |
| 1243 | DMPC15208731_Speleonectes_tulumensis_1 | dermatopontin 2  | 125 | 7.01E-13 | 57.70% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1244 | DMPC15208778_Speleonectes_tulumensis_2 | ---NA---   | 144 |          |        | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1245 | DMPC15208783_Speleonectes_tulumensis_2 | mitochondrial import inner membrane translocase subunit            | 118 | 2.62E-43 | 84.50% | F:binding; P:mitochondrion organization; P:protein transport; C:mitochondrion; C:protein complex   | 5  | IPR004217; PTHR19338 (PANTHER)  |
| 1246 | DMPC15208879_Speleonectes_tulumensis_1 | epidermal retinol dehydrogenase 2                                  | 109 | 1.74E-17 | 76.70% | P:metabolic process; F:catalytic activity; F:nucleotide binding  | 3  | IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY)  |
| 1247 | DMPC15208930_Speleonectes_tulumensis_1 | ale o 1 allergen   | 154 | 4.07E-74 | 80.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                          |
| 1248 | DMPC15208956_Speleonectes_tulumensis_0 | 5 -nucleotidase-like   | 115 | 8.29E-37 | 73.00% | -  | 0  | IPR006179; IPR008334; PTHR11575:SF7 (PANTHER)   |
| 1249 | DMPC15208958_Speleonectes_tulumensis_1 | neutral alpha-glucosidase ab                                       | 148 | 3.88E-27 | 74.30% | F:carbohydrate binding; P:carbohydrate metabolic process; F:hydrolase activity   | 3  | IPR000322; PTHR22762:SF7 (PANTHER), SSF51011 (SUPERFAMILY)  |
| 1250 | DMPC15208986_Speleonectes_tulumensis_1 | serine protease inhibitor kazal-type 6-like                        | 135 | 6.97E-09 | 67.33% | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY) |
| 1251 | DMPC15209000_Speleonectes_tulumensis_0 | fibroblast growth factor receptor 3-iiic                           | 114 | 2.44E-13 | 70.10% | P:anatomical structure morphogenesis; P:cellular component organization; P:cell differentiation; P:multicellular organismal development; P:signal transduction; P:response to endogenous stimulus; C:extracellular region; C:intracellular; P:biological_process; P:cellular protein modification process; P:embryo development; F:carbohydrate binding; P:regulation of biological process; P:cell proliferation; P:metabolic process; F:receptor activity; F:protein kinase activity; F:protein binding; C:plasma membrane | 19 | IPR013783; PTHR24416 (PANTHER), PTHR24416:SF131 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF48726 (SUPERFAMILY)                       |
| 1252 | DMPC15209010_Speleonectes_tulumensis_1 | epididymal secretory protein e1                                    | 155 | 1.86E-11 | 65.00% | P:transport; F:binding; C:intracellular  | 3  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1253 | DMPC15209033_Speleonectes_tulumensis_1 | epididymal secretory protein e1                                    | 128 | 4.30E-19 | 60.50% | -  | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1254 | DMPC15209059_Speleonectes_tulumensis_5 | glutathione peroxidase 1   | 131 | 1.25E-19 | 83.00% | -  | 0  | IPR000889; IPR012336; tmhmm (TMHMM)   |
| 1255 | DMPC15209130_Speleonectes_tulumensis_2 | sulfakinin-like peptide  | 186 | 4.21E-13 | 65.80% | C:extracellular region   | 1  | IPR013152   |
| 1256 | DMPC15209181_Speleonectes_tulumensis_1 | histone h2a  | 258 | 1.22E-74 | 92.70% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4  | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 1257 | DMPC15209224_Speleonectes_tulumensis_1 | clotting factor b-like   | 258 | 5.37E-18 | 55.00% | F:catalytic activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1258 | DMPC15209238_Speleonectes_tulumensis_1 | prophenoloxidase activating factor                                 | 122 | 3.86E-42 | 72.40% | F:peptidase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER)  |

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|------|--|---|-----|-----------|--------|---|----|---|
| 1259 | DMPC15209294_Speleonectes_tulumensis_1 | enolase   | 173 | 2.20E-105 | 90.60% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process  | 7  | IPR000941; IPR020809; IPR020810; G3DSA:3.20.20.120 (GENE3D), SSF51604 (SUPERFAMILY)   |
| 1260 | DMPC15209303_Speleonectes_tulumensis_1 | protein creg2-like                                      | 189 | 1.33E-15  | 71.60% | P:oxidation-reduction process; F:oxidoreductase activity; F:FMN binding; C:cellular component   | 4  | IPR012349; PTHR13343 (PANTHER), PTHR13343:SF4 (PANTHER), PF13883 (PFAM)   |
| 1261 | DMPC15209322_Speleonectes_tulumensis_0 | serine proteinase                                       | 122 | 5.69E-13  | 53.60% | -   | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1262 | DMPC15209372_Speleonectes_tulumensis_2 | epididymal secretory protein e1 precursor               | 149 | 2.80E-17  | 58.00% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1263 | DMPC15209398_Speleonectes_tulumensis_2 | sortilin-related receptor                               | 154 | 2.32E-13  | 46.40% | F:low-density lipoprotein particle binding; C:integral to membrane; C:membrane; P:lipid metabolic process; P:lipid transport; P:endocytosis; P:transport; C:perinuclear region of cytoplasm; P:multicellular organismal development; C:low-density lipoprotein particle; F:receptor activity; F:protein binding; P:cholesterol metabolic process; P:steroid metabolic process | 14 | IPR002172; IPR023415; PR00261 (PRINTS), PTHR12106 (PANTHER), PTHR12106:SF7 (PANTHER)  |
| 1264 | DMPC15209399_Speleonectes_tulumensis_1 | si:dkey- protein  | 106 | 2.25E-09  | 61.33% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1265 | DMPC15209466_Speleonectes_tulumensis_1 | seminal fluid protein isoform a                         | 147 | 3.25E-12  | 49.80% | F:carbohydrate binding; P:multicellular organism reproduction; C:extracellular space  | 3  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1266 | DMPC15209478_Speleonectes_tulumensis_0 | carboxypeptidase a                                      | 118 | 4.07E-17  | 65.50% | C:extracellular region; F:peptidase activity  | 2  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                                    |
| 1267 | DMPC15209524_Speleonectes_tulumensis_2 | ubiquitin-40s ribosomal protein s27a-like               | 119 | 4.35E-42  | 95.00% | C:ribosome; F:structural molecule activity; P:translation   | 3  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)  |
| 1268 | DMPC15209537_Speleonectes_tulumensis_0 | alpha-carbonic anhydrase                                | 177 | 4.99E-37  | 64.80% | -   | 0  | IPR001148; IPR023561  |
| 1269 | DMPC15209538_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor              | 258 | 2.32E-23  | 67.30% | -   | 0  | IPR026645   |
| 1270 | DMPC15209581_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                     | 155 | 7.20E-82  | 69.10% | -   | 0  | IPR005203; IPR013788; IPR014756   |
| 1271 | DMPC15209670_Speleonectes_tulumensis_2 | molecular chaperone                                     | 172 | 3.10E-60  | 84.90% | P:protein metabolic process; F:protein binding; F:nucleotide binding; P:response to stress  | 4  | IPR013126; G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF100920 (SUPERFAMILY), SSF53067 (SUPERFAMILY) |
| 1272 | DMPC15209688_Speleonectes_tulumensis_2 | serine protease   | 119 | 4.53E-10  | 61.00% | F:peptidase activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1273 | DMPC15209708_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor              | 135 | 7.50E-14  | 60.30% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1274 | DMPC15209756_Speleonectes_tulumensis_0 | clotting factor b-like                                  | 340 | 7.59E-47  | 53.90% | F:catalytic activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1275 | DMPC15209768_Speleonectes_tulumensis_0 | low-density lipoprotein receptor-related protein 2-like | 287 | 7.82E-09  | 64.20% | F:calcium ion binding; C:integral to membrane; C:membrane   | 3  | IPR002172; IPR023415; PTHR10529 (PANTHER), PTHR10529:SF151 (PANTHER), tmhmm (TMHMM)   |



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| 1276 | DMPC15209776_Speleonectes_tulumensis_1 | late trypsin   | 319 | 6.16E-39 | 57.80% | F:catalytic activity  | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP)               |
| 1277 | DMPC15209896_Speleonectes_tulumensis_2 | fasciclin-like protein precursor   | 155 | 4.04E-19 | 57.33% | -   | 0  | IPR000782; PTHR10900 (PANTHER)   |
| 1278 | DMPC15209971_Speleonectes_tulumensis_0 | cd74 antigen (invariant polypeptide of major histocompatibility class ii antigen-associated) isoform cra_d | 124 | 4.57E-10 | 72.40% | P:cellular component organization; P:regulation of biological process; P:cell proliferation; C:endosome; F:protein binding; C:lysosome; P:cell death; P:signal transduction; F:receptor binding; C:endoplasmic reticulum; P:cell differentiation; P:multicellular organismal development; P:response to stress; P:protein metabolic process; P:biological_process; P:cellular protein modification process; P:biosynthetic process; P:lipid metabolic process; F:receptor activity; C:cell; P:protein transport; C:Golgi apparatus; C:plasma membrane; P:behavior; P:response to external stimulus; C:protein complex; P:transport; F:enzyme regulator activity | 28 | IPR000716; IPR022339   |
| 1279 | DMPC15210070_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor   | 137 | 5.41E-16 | 60.20% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1280 | DMPC15210130_Speleonectes_tulumensis_0 | PREDICTED: similar to harmonin   | 226 | 2.75E-37 | 70.50% | -   | 0  | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR23116 (PANTHER), PTHR23116:SF12 (PANTHER)                                      |
| 1281 | DMPC15210193_Speleonectes_tulumensis_2 | cathepsin l  | 141 | 1.02E-66 | 79.60% | -   | 0  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY) |
| 1282 | DMPC15210220_Speleonectes_tulumensis_0 | ---NA---   | 87  |          |        | -   | 0  | G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                 |
| 1283 | DMPC15210247_Speleonectes_tulumensis_0 | cytosolic non-specific dipeptidase   | 145 | 1.33E-60 | 82.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3  | IPR011650; G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER)                                     |
| 1284 | DMPC15210250_Speleonectes_tulumensis_2 | clotting factor g beta subunit precursor   | 215 | 9.06E-17 | 60.50% | F:hydrolase activity  | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 1285 | DMPC15210290_Speleonectes_tulumensis_1 | ecdysteroid-regulated protein  | 191 | 4.87E-30 | 59.50% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1286 | DMPC15210322_Speleonectes_tulumensis_0 | 26kda protease   | 263 | 5.66E-45 | 58.80% | F:hydrolase activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)                               |
| 1287 | DMPC15210394_Speleonectes_tulumensis_0 | adhesive plaque matrix protein   | 163 | 7.04E-17 | 55.00% | -   | 0  | SignalP-NN(euk) (SIGNALP)  |
| 1288 | DMPC15210450_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor   | 137 | 8.83E-11 | 55.40% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1289 | DMPC15210489_Speleonectes_tulumensis_1 | protein disulfide isomerase  | 278 | 7.78E-39 | 87.00% | F:electron carrier activity; P:cellular homeostasis; P:regulation of biological process; P:metabolic process; F:catalytic activity; F:transferase activity; C:endoplasmic reticulum   | 7  | IPR005746; IPR005788; IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32 (PANTHER)                     |
| 1290 | DMPC15210503_Speleonectes_tulumensis_0 | myosin heavy chain   | 124 | 6.04E-38 | 89.00% | -   | 0  | IPR002928; PTHR13140 (PANTHER), PTHR13140:SF106 (PANTHER)  |
| 1291 | DMPC15210620_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor  | 133 | 1.43E-16 | 53.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity   | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1292 | DMPC15210733_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7   | 146 | 3.03E-20 | 63.70% | -   | 0  | IPR024509; IPR024716   |

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|------|--|---|-----|-----------|--------|---|---|--|
| 1293 | DMPC15210821_Speleonectes_tulumensis_0 | adp-ribosylation factor-like protein 1-like       | 128 | 9.45E-65  | 99.10% | C:intracellular; F:nucleotide binding; P:signal transduction  | 3 | IPR005225; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER), PTHR11711:SF41 (PANTHER)  |
| 1294 | DMPC15210925_Speleonectes_tulumensis_1 | cathepsin 1                                       | 608 | 6.08E-129 | 71.90% | -   | 0 | IPR000169; IPR000668; IPR013128; IPR013201; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1295 | DMPC15210948_Speleonectes_tulumensis_1 | female neotenic-specific protein 3                | 144 | 6.48E-11  | 55.14% | -   | 0 | no IPS match   |
| 1296 | DMPC15211036_Speleonectes_tulumensis_0 | neutral ceramidase                                | 307 | 4.56E-25  | 61.20% | -   | 0 | IPR006823  |
| 1297 | DMPC15211084_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like   | 113 | 4.06E-11  | 61.70% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1298 | DMPC15211093_Speleonectes_tulumensis_1 | dehydrogenase reductase sdr family member 11-like | 159 | 7.79E-30  | 76.10% | P:metabolic process   | 1 | IPR002347; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 1299 | DMPC15211133_Speleonectes_tulumensis_1 | serine protease                                   | 129 | 1.75E-20  | 65.10% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1300 | DMPC15211354_Speleonectes_tulumensis_2 | kallikrein-2 isoform 1                            | 125 | 1.60E-13  | 54.90% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1301 | DMPC15211502_Speleonectes_tulumensis_2 | hyaluronan-binding protein 2-like                 | 115 | 4.42E-12  | 53.80% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1302 | DMPC15211617_Speleonectes_tulumensis_2 | ---NA---  | 427 |           |        | -   | 0 | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER), tmhmm (TMHMM)   |
| 1303 | DMPC15211627_Speleonectes_tulumensis_0 | prepronuropeptide f i                             | 128 | 3.95E-18  | 65.00% | -   | 0 | IPR001955; IPR020392; tmhmm (TMHMM)  |
| 1304 | DMPC15211739_Speleonectes_tulumensis_0 | soma ferritin                                     | 108 | 8.44E-30  | 88.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1305 | DMPC15211791_Speleonectes_tulumensis_2 | frizzled-related protein 2                        | 122 | 2.38E-27  | 77.30% | C:extracellular region; P:multicellular organismal development; P:signal transduction   | 3 | IPR015526; IPR020067; IPR026559; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1306 | DMPC15211793_Speleonectes_tulumensis_2 | trypsin 7   | 157 | 7.18E-30  | 75.80% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1307 | DMPC15211927_Speleonectes_tulumensis_1 | hyaluronidase precursor                           | 158 | 1.07E-22  | 59.20% | F:catalytic activity  | 1 | IPR013785; IPR017853; IPR018155; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1308 | DMPC15211978_Speleonectes_tulumensis_2 | soma ferritin                                     | 111 | 3.07E-31  | 88.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1309 | DMPC15212018_Speleonectes_tulumensis_1 | plasminogen activator spa                         | 328 | 7.17E-69  | 57.70% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1310 | DMPC15212051_Speleonectes_tulumensis_2 | phospholipase a2-like                             | 141 | 6.01E-15  | 62.80% | F:phosphonase activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:cytoplasm   | 5 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP)   |
| 1311 | DMPC15212065_Speleonectes_tulumensis_2 | plasminogen activator spa                         | 216 | 8.28E-32  | 57.10% | F:catalytic activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1312 | DMPC15212135_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate dehydrogenase          | 284 | 2.01E-130 | 84.60% | C:cytoplasm; F:nucleotide binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; F:catalytic activity; P:metabolic process | 7 | IPR016040; IPR020828; IPR020829; IPR020830; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF51735 (SUPERFAMILY), SSF55347 (SUPERFAMILY)  |

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| 1313 | DMPC15212183_Speleonectes_tulumensis_0 | placental protein 11                           | 137 | 5.57E-29 | 68.50% | F:hydrolase activity, acting on ester bonds  | 1 | IPR018998; PTHR12439 (PANTHER), PTHR12439:SF6 (PANTHER), SSF142877 (SUPERFAMILY)   |
| 1314 | DMPC15212221_Speleonectes_tulumensis_2 | epididymal secretory protein e1 precursor      | 152 | 7.78E-26 | 56.80% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1315 | DMPC15212227_Speleonectes_tulumensis_1 | ---NA---                                       | 310 |          |        | -  | 0 | no IPS match   |
| 1316 | DMPC15212275_Speleonectes_tulumensis_1 | dnaj homolog subfamily c member 9              | 124 | 1.17E-37 | 83.00% | P:protein metabolic process; F:protein binding   | 2 | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF16 (PANTHER)  |
| 1317 | DMPC15212379_Speleonectes_tulumensis_1 | isoform f                                      | 162 | 1.59E-09 | 42.00% | P:proteolysis; P:cell proliferation; F:metalloendopeptidase activity; C:cellular_component   | 4 | IPR006586; IPR024079   |
| 1318 | DMPC15212425_Speleonectes_tulumensis_0 | ---NA---                                       | 124 |          |        | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1319 | DMPC15212439_Speleonectes_tulumensis_1 | phospholipase a2-like                          | 155 | 5.01E-17 | 58.80% | F:phosphonpase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular_region   | 5 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP)   |
| 1320 | DMPC15212613_Speleonectes_tulumensis_1 | ---NA---                                       | 333 |          |        | -  | 0 | no IPS match   |
| 1321 | DMPC15212626_Speleonectes_tulumensis_0 | low quality protein: neuferriecin-like         | 285 | 4.10E-62 | 61.70% | F:heme binding   | 1 | IPR001199; PTHR10281 (PANTHER), PTHR10281:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1322 | DMPC15212733_Speleonectes_tulumensis_2 | chitinase domain-containing protein 1-like     | 122 | 5.12E-17 | 63.10% | P:chitin catabolic process; F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity; F:chitinase activity | 6 | PTHR11177 (PANTHER), tmhmm (TMHMM)   |
| 1323 | DMPC15212774_Speleonectes_tulumensis_2 | selenium-dependent glutathione peroxidase      | 134 | 8.37E-49 | 78.80% | -  | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 1324 | DMPC15212875_Speleonectes_tulumensis_1 | mantle protein 9                               | 148 | 1.42E-08 | 64.75% | -  | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1325 | DMPC15212935_Speleonectes_tulumensis_0 | 14-3-3 protein                                 | 248 | 3.20E-97 | 79.20% | F:protein binding  | 1 | IPR000308; IPR023410; PTHR18860:SF0 (PANTHER)  |
| 1326 | DMPC15212943_Speleonectes_tulumensis_0 | ---NA---                                       | 86  |          |        | -  | 0 | IPR000867; IPR011390   |
| 1327 | DMPC15212961_Speleonectes_tulumensis_2 | kazal-type protease inhibitor                  | 100 | 1.62E-12 | 57.20% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 1328 | DMPC15213014_Speleonectes_tulumensis_0 | aldehyde dehydrogenase mitochondrial-like      | 129 | 3.55E-64 | 85.70% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)   |
| 1329 | DMPC15213046_Speleonectes_tulumensis_0 | ---NA---                                       | 129 |          |        | -  | 0 | IPR026645  |
| 1330 | DMPC15213182_Speleonectes_tulumensis_2 | group 3 secretory phospholipase a2-like        | 147 | 5.57E-44 | 60.00% | -  | 0 | IPR001211; IPR013090; IPR016090; PTHR12253:SF7 (PANTHER)   |
| 1331 | DMPC15213186_Speleonectes_tulumensis_1 | cathepsin 1                                    | 106 | 8.88E-29 | 72.60% | -  | 0 | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)  |
| 1332 | DMPC15213236_Speleonectes_tulumensis_2 | heat shock cognate 70                          | 145 | 3.89E-39 | 91.80% | -  | 0 | IPR013126; G3DSA:1.20.1270.10 (GENE3D), PTHR19375 (PANTHER), SSF100934 (SUPERFAMILY)   |
| 1333 | DMPC15213304_Speleonectes_tulumensis_1 | isoamyl acetate-hydrolyzing esterase 1 homolog | 147 | 5.78E-26 | 68.30% | -  | 0 | IPR001087; IPR013831; PTHR14209 (PANTHER), SSF52266 (SUPERFAMILY)  |

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|------|--|--|-----|----------|--------|--|----|---|
| 1334 | DMPC15213349_Speleonectes tulumensis 2 | hemocyanin subunit type 1 precursor                  | 138 | 8.84E-48 | 69.10% | -  | 0  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1335 | DMPC15213391_Speleonectes tulumensis 1 | hypothetical protein, partial                        | 336 | 5.29E-08 | 47.50% | -  | 0  | no IPS match  |
| 1336 | DMPC15213470_Speleonectes tulumensis 2 | ---NA---   | 79  |          |        | -  | 0  | IPR000941; IPR020810; G3DSA:3.20.20.120 (GENE3D), SSF51604 (SUPERFAMILY)  |
| 1337 | DMPC15213495_Speleonectes tulumensis 0 | ubiquitin-40s ribosomal protein s27a                 | 136 | 6.55E-47 | 97.50% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                            |
| 1338 | DMPC15213553_Speleonectes tulumensis 1 | upf0364 protein c6orf211 homolog                     | 128 | 4.29E-22 | 61.30% | F:molecular_function; P:biological_process; C:cellular_component   | 3  | IPR002791; PTHR12260 (PANTHER)  |
| 1339 | DMPC15213629_Speleonectes tulumensis 0 | abhydrolase domain-containing protein 9              | 65  | 5.77E-15 | 90.10% | P:metabolic process; F:hydrolase activity  | 2  | G3DSA:3.40.50.1820 (GENE3D), PTHR10992:SF98 (PANTHER), SSF53474 (SUPERFAMILY)   |
| 1340 | DMPC15213669_Speleonectes tulumensis 2 | cathepsin I-like                                     | 122 | 6.13E-20 | 86.00% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                                |
| 1341 | DMPC15213729_Speleonectes tulumensis 2 | soma ferritin  | 119 | 5.22E-26 | 77.30% | F:binding  | 1  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1342 | DMPC15213733_Speleonectes tulumensis 2 | grn protein  | 149 | 4.18E-08 | 46.89% | P:axon extension   | 1  | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER)   |
| 1343 | DMPC15213742_Speleonectes tulumensis 1 | anti-lipopolysaccharide factor                       | 135 | 6.67E-12 | 72.40% | -  | 0  | IPR024509; IPR024716  |
| 1344 | DMPC15213758_Speleonectes tulumensis 0 | dermatopontin 2                                      | 271 | 3.70E-27 | 57.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1345 | DMPC15213872_Speleonectes tulumensis 0 | soma ferritin  | 124 | 4.90E-32 | 87.10% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1346 | DMPC15213911_Speleonectes tulumensis 2 | myotrophin-like isoform 2                            | 143 | 4.80E-52 | 81.80% | -  | 0  | IPR002110; IPR020683; PTHR24152 (PANTHER), PTHR24152:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1347 | DMPC15213957_Speleonectes tulumensis 2 | hemagglutinin amebocyte aggregation factor precursor | 147 | 3.14E-26 | 62.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1348 | DMPC15213986_Speleonectes tulumensis 0 | aldehyde dehydrogenase 3-1 variant b                 | 292 | 5.42E-74 | 72.30% | F:catalytic activity; P:metabolic process  | 2  | IPR012394; IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), tmhmm (TMHMM)  |
| 1349 | DMPC15214186_Speleonectes tulumensis 1 | isoform cra_b  | 121 | 1.21E-46 | 97.70% | -  | 0  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 1350 | DMPC15214207_Speleonectes tulumensis 0 | transcription factor sp5                             | 286 | 1.50E-32 | 83.40% | -  | 0  | IPR007087; IPR013087; IPR015880; PTHR23223 (PANTHER), PTHR23223:SF14 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                        |
| 1351 | DMPC15214232_Speleonectes tulumensis 2 | d-dopachrome decarboxylase-a                         | 197 | 1.07E-16 | 57.10% | -  | 0  | IPR001398; IPR014347; G3DSA:3.30.429.10 (GENE3D)  |

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|------|--|--|-----|----------|--------|--|---|---|
| 1352 | DMPC15214342_Speleonectes_tulumensis_1 | ---NA---   | 152 |          | -      | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24250 (PANTHER), PTHR24250:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP) |   |
| 1353 | DMPC15214367_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor   | 133 | 1.14E-25 | 68.90% | -  | 0   | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1354 | DMPC15214380_Speleonectes_tulumensis_0 | phospholipase a2   | 145 | 1.40E-18 | 65.60% | F:phospholipase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; F:hydrolase activity; C:extracellular region                | 6   | IPR001211; IPR013090; IPR016090   |
| 1355 | DMPC15214455_Speleonectes_tulumensis_2 | cathepsin l-like   | 161 | 2.11E-22 | 87.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3   | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1356 | DMPC15214488_Speleonectes_tulumensis_5 | protein  | 140 | 8.57E-09 | 72.33% | -  | 0   | no IPS match  |
| 1357 | DMPC15214497_Speleonectes_tulumensis_2 | trypsin-like serine proteinase 1   | 128 | 1.45E-27 | 64.90% | -  | 0   | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)                               |
| 1358 | DMPC15214500_Speleonectes_tulumensis_1 | kazal-type proteinase inhibitor  | 146 | 1.55E-15 | 56.40% | -  | 0   | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 1359 | DMPC15214546_Speleonectes_tulumensis_1 | ame: full=hemagglutinin amoeba aggregation factor ame: full=18k-laf flags: precursor | 167 | 3.19E-11 | 69.80% | -  | 0   | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1360 | DMPC15214569_Speleonectes_tulumensis_0 | i-type lysozyme  | 270 | 1.28E-36 | 64.10% | F:lysozyme activity  | 1   | IPR008597; IPR018247  |
| 1361 | DMPC15214614_Speleonectes_tulumensis_2 | dermatopontin 2  | 225 | 6.33E-40 | 59.70% | -  | 0   | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1362 | DMPC15214630_Speleonectes_tulumensis_0 | chitinase 1  | 176 | 1.99E-30 | 52.00% | -  | 0   | IPR001223; IPR002557; IPR013781; IPR017853; PTHR11177 (PANTHER)   |
| 1363 | DMPC15214659_Speleonectes_tulumensis_0 | protein  | 134 | 2.10E-18 | 51.80% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                          | 4   | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1364 | DMPC15214698_Speleonectes_tulumensis_2 | protein  | 145 | 4.05E-19 | 52.70% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                          | 4   | IPR000716; PTHR12352 (PANTHER)  |
| 1365 | DMPC15214721_Speleonectes_tulumensis_0 | vitellogenin 2   | 431 | 1.70E-40 | 46.30% | P:lipid transport; F:lipid transporter activity  | 2   | IPR001747; IPR011030; IPR015816; IPR015819; PTHR23345 (PANTHER)   |
| 1366 | DMPC15214932_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor  | 149 | 3.54E-69 | 68.50% | -  | 0   | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                      |
| 1367 | DMPC15215020_Speleonectes_tulumensis_0 | #NAME?   | 211 | 2.65E-25 | 52.80% | F:unfolded protein binding; P:protein folding; F:heat shock protein binding; F:molecular_function; C:membrane; P:biological_process; P:spermatogenesis; C:cellular_component | 8   | IPR001623; PTHR24078 (PANTHER), PTHR24078:SF22 (PANTHER), tmhmm (TMHMM)   |
| 1368 | DMPC15215075_Speleonectes_tulumensis_0 | annexin x  | 223 | 6.28E-50 | 72.40% | F:actin binding; F:calcium ion binding; F:lipid binding  | 3   | IPR001464; IPR018252; IPR018502; PTHR10502:SF23 (PANTHER), tmhmm (TMHMM)  |
| 1369 | DMPC15215188_Speleonectes_tulumensis_0 | proclotting enzyme   | 202 | 1.28E-27 | 60.50% | -  | 0   | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 1370 | DMPC15215273_Speleonectes_tulumensis_2 | neutral alpha-glucosidase ab-like  | 349 | 1.25E-33 | 66.20% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; F:carbohydrate binding; P:carbohydrate metabolic process; F:catalytic activity                                       | 4   | IPR000322; PTHR22762:SF7 (PANTHER)  |
| 1371 | DMPC15215274_Speleonectes_tulumensis_1 | dermatopontin 2  | 114 | 1.32E-09 | 58.00% | -  | 0   | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

|      |  |   |     |          |        |   |   |   |
|------|--|---|-----|----------|--------|---|---|---|
| 1372 | DMPC15215323_Speleonectes_tulumensis_2 | ame: full=prohormone-1 contains: ame: full=brain peptide lrnqldigdlq contains: ame: full=brain peptide lrnqldigdl contains: ame: full=brain peptide sywkqcafnavscf-amide flags: precursor | 118 | 1.21E-24 | 73.80% | -   | 0 | tmhmm (TMHMM)   |
| 1373 | DMPC15215329_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor  | 176 | 1.59E-32 | 61.00% | -   | 0 | IPR026645   |
| 1374 | DMPC15215334_Speleonectes_tulumensis_1 | hyaluronidase precursor   | 225 | 1.15E-49 | 56.80% | P:defense response; F:hydrolase activity; P:metabolic process; P:carbohydrate metabolic process; F:hyalurononglucosaminidase activity; F:hydrolase activity, acting on glycosyl bonds; F:catalytic activity; C:extracellular region | 8 | IPR013785; IPR017853; IPR018155; PTHR11769:SF8 (PANTHER)  |
| 1375 | DMPC15215401_Speleonectes_tulumensis_0 | ---NA---  | 120 |          |        | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1376 | DMPC15215491_Speleonectes_tulumensis_0 | glycosyl-phosphatidylinositol-linked carbonic anhydrase   | 238 | 2.06E-26 | 65.60% | -   | 0 | IPR001148; IPR023561; SignalP-NN(euk) (SIGNALP)   |
| 1377 | DMPC15215574_Speleonectes_tulumensis_0 | nad-dependent glyceraldehyde-3-phosphate dehydrogenase  | 124 | 1.55E-19 | 89.60% | F:catalytic activity; P:metabolic process   | 2 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)  |
| 1378 | DMPC15215587_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor  | 104 | 1.27E-22 | 61.30% | -   | 0 | IPR026645   |
| 1379 | DMPC15215662_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like   | 143 | 9.36E-22 | 62.00% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1380 | DMPC15215671_Speleonectes_tulumensis_2 | epididymal secretory protein e1 isoform 1   | 137 | 4.59E-22 | 59.30% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                       |
| 1381 | DMPC15215701_Speleonectes_tulumensis_0 | dermatopontin 3   | 101 | 3.53E-09 | 63.43% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1382 | DMPC15215784_Speleonectes_tulumensis_2 | plasminogen activator spa   | 132 | 2.62E-22 | 63.00% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1383 | DMPC15215790_Speleonectes_tulumensis_0 | lipophorin receptor   | 94  | 1.41E-12 | 70.40% | F:receptor activity; F:transferase activity; P:transport; P:cellular component organization; C:cell   | 5 | IPR002172; IPR023415; PTHR10529 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1384 | DMPC15215840_Speleonectes_tulumensis_2 | dermatopontin   | 223 | 3.07E-08 | 64.00% | -   | 0 | no IPS match  |
| 1385 | DMPC15215858_Speleonectes_tulumensis_2 | trypsin 3   | 120 | 4.11E-17 | 59.30% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1386 | DMPC15215904_Speleonectes_tulumensis_2 | prophenoloxidase activating factor  | 129 | 2.78E-27 | 65.40% | -   | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER)                 |
| 1387 | DMPC15216196_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor   | 95  | 3.82E-27 | 89.90% | -   | 0 | IPR000896; IPR008922; IPR013788; PTHR11511:SF20 (PANTHER)   |

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|------|--|---|-----|----------|--------|--|----|--|
| 1388 | DMPC15216380_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a            | 150 | 1.09E-57 | 97.20% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 | IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 1389 | DMPC15216412_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor                  | 145 | 1.80E-29 | 67.10% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1390 | DMPC15216438_Speleonectes_tulumensis_0 | trypsin-like serine proteinase 1                | 115 | 2.67E-12 | 56.90% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                  |
| 1391 | DMPC15216449_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor | 143 | 7.75E-20 | 52.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities  | 4  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1392 | DMPC15216542_Speleonectes_tulumensis_1 | glucose dehydrogenase                           | 194 | 2.36E-26 | 72.60% | -  | 0  | IPR000172; G3DSA:3.50.50.60 (GENE3D), PTHR11552 (PANTHER), PTHR11552:SF10 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF51905 (SUPERFAMILY)    |
| 1393 | DMPC15216595_Speleonectes_tulumensis_2 | PREDICTED: hypothetical protein                 | 97  | 3.55E-09 | 78.00% | -  | 0  | tmhmm (TMHMM)  |
| 1394 | DMPC15216626_Speleonectes_tulumensis_2 | ferritin mitochondrial                          | 88  | 1.66E-18 | 87.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; tmhmm (TMHMM)   |
| 1395 | DMPC15216726_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 234 | 5.05E-12 | 57.10% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:proteolysis; F:peptidase activity   | 6  | IPR000716; PTHR12352 (PANTHER)   |
| 1396 | DMPC15216782_Speleonectes_tulumensis_0 | chorion peroxidase                              | 209 | 2.24E-42 | 63.20% | P:oxidation-reduction process; F:heme binding; F:oxidoreductase activity; P:response to oxidative stress; F:peroxidase activity; F:carbohydrate binding; P:cell adhesion   | 7  | IPR002007; IPR010255; PTHR11475 (PANTHER), tmhmm (TMHMM)   |
| 1397 | DMPC15216812_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 130 | 1.34E-13 | 55.70% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1398 | DMPC15216827_Speleonectes_tulumensis_2 | glutathione peroxidase                          | 303 | 1.89E-37 | 63.40% | F:catalytic activity   | 1  | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 1399 | DMPC15216873_Speleonectes_tulumensis_0 | trypsinogen 2                                   | 162 | 2.82E-29 | 64.10% | -  | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)   |
| 1400 | DMPC15216878_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor             | 135 | 2.73E-84 | 68.80% | -  | 0  | IPR005203; IPR013788; IPR014756  |
| 1401 | DMPC15216891_Speleonectes_tulumensis_0 | 60s ribosomal protein l40                       | 98  | 5.37E-47 | 97.00% | C:ribosome; F:structural molecule activity; P:translation  | 3  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                       |
| 1402 | DMPC15216908_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 105 | 2.29E-14 | 57.20% | -  | 0  | IPR026645  |
| 1403 | DMPC15216941_Speleonectes_tulumensis_2 | ferritin-1 heavy chain                          | 92  | 3.88E-22 | 90.60% | P:cellular homeostasis; F:binding; F:catalytic activity; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |

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|------|--|--|-----|----------|--------|--|---|---|
| 1404 | DMPC15216956_Speleonectes_tulumensis_2 | galactosamine (n-acetyl)-6-sulfate sulfatase | 120 | 4.47E-23 | 94.40% | C:lysosome; F:binding; P:metabolic process; F:hydrolase activity   | 4 | IPR000917; IPR017849; IPR017850; PTHR10342 (PANTHER), PTHR10342:SF27 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)          |
| 1405 | DMPC15216958_Speleonectes_tulumensis_0 | dermatopontin 3                              | 182 | 7.85E-15 | 61.20% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1406 | DMPC15216966_Speleonectes_tulumensis_0 | dermatopontin 2                              | 134 | 7.34E-12 | 54.70% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1407 | DMPC15216983_Speleonectes_tulumensis_1 | anti-lipop polysaccharide factor isoform 7   | 133 | 1.45E-24 | 68.10% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1408 | DMPC15217041_Speleonectes_tulumensis_0 | oocyte protease inhibitor-1 precursor        | 106 | 8.01E-11 | 66.90% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1409 | DMPC15217219_Speleonectes_tulumensis_1 | protein                                      | 94  | 3.10E-11 | 80.40% | C:extracellular region; F:calcium ion binding  | 2 | IPR000152; IPR000742; IPR013032; G3DSA:2.10.25.10 (GENE3D), PTHR24048 (PANTHER), PTHR24048:SF15 (PANTHER), SSF57196 (SUPERFAMILY) |
| 1410 | DMPC15217236_Speleonectes_tulumensis_2 | nidogen 1                                    | 76  | 2.15E-10 | 67.60% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP)   |
| 1411 | DMPC15217300_Speleonectes_tulumensis_2 | metalloprotease                              | 139 | 4.57E-07 | 57.40% | P:proteolysis; F:peptidase activity; F:metalloendopeptidase activity; F:metallopeptidase activity                | 4 | SignalP-NN(euk) (SIGNALP)   |
| 1412 | DMPC15217341_Speleonectes_tulumensis_0 | ferritin 3-like protein                      | 134 | 1.37E-25 | 76.80% | F:binding  | 1 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1413 | DMPC15217465_Speleonectes_tulumensis_0 | carcinolectin5b-4                            | 216 | 1.53E-50 | 66.90% | -  | 0 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)   |
| 1414 | DMPC15217472_Speleonectes_tulumensis_1 | wnt inhibitory factor 1 precursor            | 111 | 7.73E-49 | 83.90% | -  | 0 | IPR000742; IPR013032; G3DSA:2.10.25.10 (GENE3D), PTHR24838 (PANTHER), PTHR24838:SF30 (PANTHER), SSF57196 (SUPERFAMILY)            |
| 1415 | DMPC15217495_Speleonectes_tulumensis_0 | probable reductase                           | 122 | 6.10E-16 | 74.60% | P:oxidation-reduction process; F:oxidoreductase activity; C:cellular component                                   | 3 | IPR001395; IPR023210; PTHR11732:SF34 (PANTHER)  |
| 1416 | DMPC15217524_Speleonectes_tulumensis_2 | dehydrogenase reductase sdr family member 7  | 312 | 1.70E-33 | 71.70% | P:metabolic process  | 1 | IPR002198; IPR002347; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF27 (PANTHER), tmhmm (TMHMM), SSF51735 (SUPERFAMILY)             |
| 1417 | DMPC15217525_Speleonectes_tulumensis_0 | aael013299- partial                          | 139 | 1.57E-22 | 60.30% | F:catalytic activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP)                        |
| 1418 | DMPC15217645_Speleonectes_tulumensis_1 | transmembrane protease serine 6- partial     | 141 | 1.52E-12 | 50.75% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), SignalP-NN(euk) (SIGNALP)                        |
| 1419 | DMPC15217661_Speleonectes_tulumensis_1 | zinc finger protein 248-like                 | 80  | 3.08E-16 | 64.00% | -  | 0 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)             |
| 1420 | DMPC15217756_Speleonectes_tulumensis_1 | epididymal secretory protein e1 precursor    | 147 | 1.01E-23 | 59.00% | P:biological process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 1421 | DMPC15217764_Speleonectes_tulumensis_0 | carcinolectin 5a partial                     | 162 | 1.34E-32 | 59.40% | -  | 0 | IPR002181; IPR014716; PTHR19143 (PANTHER)   |
| 1422 | DMPC15218054_Speleonectes_tulumensis_2 | subfamily member 9                           | 124 | 7.42E-38 | 82.40% | P:protein metabolic process; P:behavior; F:protein binding   | 3 | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF16 (PANTHER)   |
| 1423 | DMPC15218111_Speleonectes_tulumensis_0 | peptidase m4 thermolysin                     | 119 | 2.32E-07 | 62.63% | P:proteolysis; F:hydrolase activity; F:metalloendopeptidase activity   | 3 | no IPS match  |
| 1424 | DMPC15218195_Speleonectes_tulumensis_0 | protein lethal giant larvae-like             | 165 | 8.96E-48 | 84.70% | -  | 0 | IPR001680; IPR015943; IPR017986; IPR019775; PTHR10241 (PANTHER), PTHR10241:SF10 (PANTHER)   |



|      |  |  |     |           |         |  |  |
|------|--|--|-----|-----------|---------|--|--|
| 1425 | DMPC15218226_Speleonectes tulumensis 1 | ---NA---   | 88  | -         | -       | 0  | IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)  |
| 1426 | DMPC15218227_Speleonectes tulumensis 2 | hemocyanin subunit type 1 precursor                  | 150 | 4.47E-56  | 72.20%  | -  | IPR005203; IPR013788; IPR014756; SignalP-NN(euk) (SIGNALP)   |
| 1427 | DMPC15218313_Speleonectes tulumensis 0 | calmodulin   | 199 | 5.84E-101 | 100.00% | -  | IPR002048; IPR011992; IPR018247; PTHR23050 (PANTHER), SSF47473 (SUPERFAMILY)                       |
| 1428 | DMPC15218369_Speleonectes tulumensis 0 | hypothetical protein DAPPUDRAFT_332702               | 312 | 5.30E-73  | 62.00%  | P:lipid transport; F:lipid transporter activity  | IPR001747; IPR015816; IPR015819; PTHR23345 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)     |
| 1429 | DMPC15218411_Speleonectes tulumensis 1 | hemocyanin subunit type 1 precursor                  | 143 | 6.49E-58  | 69.70%  | -  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER)   |
| 1430 | DMPC15218415_Speleonectes tulumensis 2 | gamma-interferon-inducible lysosomal thiol reductase | 135 | 2.64E-11  | 55.80%  | -  | IPR004911; PTHR13234:SF7 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                       |
| 1431 | DMPC15218443_Speleonectes tulumensis 0 | dermatopontin 2                                      | 104 | 2.77E-08  | 62.14%  | -  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1432 | DMPC15218559_Speleonectes tulumensis 2 | ame: full=saxiphilin short=sax flags: precursor      | 127 | 1.67E-15  | 50.30%  | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1433 | DMPC15218611_Speleonectes tulumensis 0 | -like protein subfamily c member 1                   | 97  | 6.63E-15  | 84.40%  | P:regulation of biological process; P:protein transport; F:protein binding; P:protein metabolic process; C:nuclear envelope; C:cell; C:endoplasmic reticulum; P:catabolic process; F:enzyme regulator activity; F:DNA binding; P:translation; P:biological process | IPR001623; PTHR24078 (PANTHER), PTHR24078:SF10 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1434 | DMPC15218665_Speleonectes tulumensis 1 | lysozyme precursor                                   | 116 | 2.32E-12  | 60.60%  | F:lysozyme activity; P:cell wall macromolecule catabolic process   | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER)     |
| 1435 | DMPC15218669_Speleonectes tulumensis 0 | perlucin 5   | 153 | 1.22E-12  | 50.30%  | F:protein binding  | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)     |
| 1436 | DMPC15218694_Speleonectes tulumensis 2 | allergen 5   | 155 | 1.35E-18  | 53.60%  | -  | IPR001283; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                     |
| 1437 | DMPC15218695_Speleonectes tulumensis 0 | perlucin 5   | 152 | 3.64E-11  | 47.20%  | F:carbohydrate binding   | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)     |
| 1438 | DMPC15218813_Speleonectes tulumensis 2 | soma ferritin  | 117 | 8.70E-36  | 89.00%  | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1439 | DMPC15218848_Speleonectes tulumensis 1 | hemagglutinin amebocyte aggregation factor-like      | 149 | 1.93E-11  | 62.40%  | -  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

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|------|--|---|-----|----------|--------|--|---|---|
| 1440 | DMPC15218869_Speleonectes tulumensis_0 | ---NA---  | 247 |          | -      |  | 0 | IPR008197; PTHR19441 (PANTHER)  |
| 1441 | DMPC15218879_Speleonectes tulumensis_0 | alkyl hydroperoxide reductase thiol specific antioxidant mal allergen | 154 | 3.41E-59 | 81.00% | P:metabolic process; F:catalytic activity; F:antioxidant activity  | 3 | IPR000866; IPR012336; IPR024706; PTHR10681 (PANTHER), PTHR10681:SF51 (PANTHER)  |
| 1442 | DMPC15218880_Speleonectes tulumensis_2 | protein phosphatase 1 regulatory subunit 7-like                       | 128 | 1.45E-26 | 87.30% | -  | 0 | IPR001611; IPR003591; IPR025875; G3DSA:3.80.10.10 (GENE3D), PTHR10588 (PANTHER), PTHR10588:SF96 (PANTHER), SM00365 (SMART), SSF52058 (SUPERFAMILY)  |
| 1443 | DMPC15218930_Speleonectes tulumensis_2 | pc3-like endoprotease variant a-like                                  | 460 | 4.45E-98 | 61.20% | F:hydrolase activity   | 1 | IPR000209; IPR002884; IPR008979; IPR015500; IPR023828; PTHR10795:SF155 (PANTHER)  |
| 1444 | DMPC15219005_Speleonectes tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor                       | 133 | 3.45E-09 | 58.60% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:proteolysis; F:peptidase activity | 6 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1445 | DMPC15219012_Speleonectes tulumensis_0 | ---NA---  | 177 |          | -      |  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER), PTHR24259:SF33 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1446 | DMPC15219026_Speleonectes tulumensis_2 | i-type lysozyme partial   | 240 | 8.91E-21 | 66.90% | F:lysozyme activity  | 1 | IPR008597; PTHR11195:SF12 (PANTHER)   |
| 1447 | DMPC15219030_Speleonectes tulumensis_2 | apolipoprotein d  | 182 | 1.46E-38 | 61.70% | F:lipid binding; P:transport; F:transporter activity   | 3 | IPR000566; IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                                 |
| 1448 | DMPC15219033_Speleonectes tulumensis_1 | trypsinogen 3   | 155 | 2.25E-23 | 55.50% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)                               |
| 1449 | DMPC15219114_Speleonectes tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase                  | 166 | 1.27E-34 | 54.60% | -  | 0 | IPR004911   |
| 1450 | DMPC15219163_Speleonectes tulumensis_1 | anti-lipopolysaccharide factor isoform 7                              | 128 | 1.95E-23 | 67.00% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1451 | DMPC15219203_Speleonectes tulumensis_1 | low quality protein: zinc finger protein 233                          | 178 | 4.13E-40 | 76.90% | F:nucleic acid binding; C:nucleoplasm; C:protein complex; C:nucleolus; F:protein binding; P:regulation of biological process;  | 7 | IPR007087; IPR013087; IPR015880; PTHR24402 (PANTHER), PTHR24402:SF42 (PANTHER), PF13465 (PFAM), tmhmm (TMHMM), SSF57667 (SUPERFAMILY)               |
| 1452 | DMPC15219212_Speleonectes tulumensis_2 | ---NA---  | 140 |          | -      |  | 0 | IPR002110; IPR020683; PTHR24125 (PANTHER)   |
| 1453 | DMPC15219215_Speleonectes tulumensis_2 | PREDICTED: hypothetical protein LOC100645147                          | 158 | 1.28E-07 | 61.33% | -  | 0 | SSF57501 (SUPERFAMILY)  |
| 1454 | DMPC15219374_Speleonectes tulumensis_2 | trypsinogen 2   | 157 | 6.95E-42 | 66.40% | -  | 0 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)   |
| 1455 | DMPC15219420_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor isoform 7                              | 155 | 2.05E-29 | 67.90% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1456 | DMPC15219436_Speleonectes tulumensis_1 | trypsinogens 1  | 161 | 1.21E-23 | 57.50% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                           |
| 1457 | DMPC15219493_Speleonectes tulumensis_0 | protein   | 139 | 6.03E-18 | 51.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                      | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1458 | DMPC15219511_Speleonectes tulumensis_0 | ---NA---  | 95  |          | -      |  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1459 | DMPC15219585_Speleonectes tulumensis_2 | dehydrogenase reductase sdr family member 11-like                     | 130 | 9.58E-37 | 77.10% | P:metabolic process  | 1 | IPR002198; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)  |

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|------|--|---|-----|-----------------|--|--|
| 1460 | DMPC15219631_Speleonectes tulumensis 2 | ---NA---  | 137 | -               | 0  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP)  |
| 1461 | DMPC15219730_Speleonectes tulumensis 1 | bola-like protein 3   | 141 | 1.68E-10 79.80% | C:extracellular region   | 1 PTHR12735 (PANTHER), PTHR12735:SF1 (PANTHER)   |
| 1462 | DMPC15219755_Speleonectes tulumensis 2 | ame: full=venom allergen 5 ame: full=antigen 5 ame: full=cysteine-rich venom protein short=crvp ame: allergen=pac c 3 | 160 | 3.58E-07 65.00% | -  | 0 IPR001283; IPR014044   |
| 1463 | DMPC15220102_Speleonectes tulumensis 1 | hypothetical protein DAPPUDRAFT_332703  | 549 | 1.12E-22 43.00% | P:lipid transport; F:lipid transporter activity  | 2 no IPS match   |
| 1464 | DMPC15220114_Speleonectes tulumensis 2 | nucleobindin 1  | 169 | 2.92E-31 67.70% | -  | 0 PTHR19237 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1465 | DMPC15220129_Speleonectes tulumensis 1 | coiled-coil domain-containing   | 203 | 2.27E-07 72.00% | -  | 0 IPR026321; PTHR14735:SF0 (PANTHER), tmhmm (TMHMM)  |
| 1466 | DMPC15220173_Speleonectes tulumensis 1 | niemann-pick type c2  | 123 | 5.47E-16 58.60% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6 IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1467 | DMPC15220419_Speleonectes tulumensis 2 | anti-lipoplysaccharide factor   | 143 | 2.14E-13 71.60% | -  | 0 IPR024509; IPR024716   |
| 1468 | DMPC15220459_Speleonectes tulumensis 2 | pacifastin light chain  | 157 | 4.84E-09 52.86% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity  | 2 IPR008037; IPR020862   |
| 1469 | DMPC15220495_Speleonectes tulumensis 2 | carboxypeptidase b-like   | 134 | 1.18E-19 68.30% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion   | 4 IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 1470 | DMPC15220535_Speleonectes tulumensis 2 | epididymal secretory protein e1   | 139 | 3.57E-11 63.50% | P:transport; F:binding; C:intracellular  | 3 IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1471 | DMPC15220552_Speleonectes tulumensis 0 | ubiquitin-40s ribosomal protein s27a-like protein   | 144 | 2.65E-52 90.90% | C:nucleoplasm; P:signal transduction; P:response to stress; P:DNA metabolic process; P:translation; F:binding; P:metabolic process; F:structural molecule activity; C:endosome; C:ribosome; C:cytosol  | 11 IPR000626; IPR002906; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)            |
| 1472 | DMPC15220657_Speleonectes tulumensis 1 | ubiquitin-40s ribosomal protein s27a  | 152 | 9.32E-56 97.00% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport | 27 IPR000626; IPR002906; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 1473 | DMPC15220671_Speleonectes tulumensis 0 | chymotrypsin-like elastase family member 2a-like  | 136 | 2.92E-09 61.80% | F:peptidase activity   | 1 IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)  |
| 1474 | DMPC15220740_Speleonectes tulumensis 2 | chymotrypsin 1  | 130 | 2.72E-15 65.90% | F:peptidase activity   | 1 IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1475 | DMPC15220830_Speleonectes tulumensis 0 | trypsinogen 2   | 121 | 1.41E-12 72.00% | -  | 0 IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24250 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                 |

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|------|--|--|-----|----------|--------|---|----|---|
| 1476 | DMPC15220872_Speleonectes tulumensis_1 | soma ferritin  | 119 | 4.12E-35 | 87.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1477 | DMPC15220935_Speleonectes tulumensis_2 | ves g 5 allergen   | 154 | 2.64E-21 | 53.20% | C:extracellular region  | 1  | IPR001283; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1478 | DMPC15220965_Speleonectes tulumensis_2 | adp ribosylation factor isoform a  | 131 | 3.94E-24 | 95.10% | F:signal transducer activity; F:signal transduction; C:intracellular; P:cellular protein modification process; P:transport; P:cell-cell signaling; F:hydrolase activity; F:transferase activity; P:multicellular organismal development; P:cellular component organization; P:protein transport; F:nucleotide binding | 12 | IPR006689; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1479 | DMPC15221082_Speleonectes tulumensis_1 | isoform a  | 153 | 1.89E-20 | 82.20% | F:molecular_function; P:biological_process; C:cellular_component  | 3  | tmhmm (TMHMM)   |
| 1480 | DMPC15221090_Speleonectes tulumensis_0 | epididymal secretory protein e1 isoform 1  | 150 | 2.74E-22 | 57.30% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                             |
| 1481 | DMPC15221140_Speleonectes tulumensis_2 | ---NA---   | 119 |          |        | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1482 | DMPC15221142_Speleonectes tulumensis_0 | anti-lipopolsaccharide factor isoform 7  | 136 | 2.28E-21 | 72.00% | -   | 0  | IPR024509; IPR024716  |
| 1483 | DMPC15221158_Speleonectes tulumensis_2 | soma ferritin  | 121 | 2.46E-36 | 85.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1484 | DMPC15221288_Speleonectes tulumensis_1 | leg5_rat ame: full=galectin-5 short=gal-5 ame: full=r1-18  | 128 | 3.95E-27 | 58.40% | F:carbohydrate binding  | 1  | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)  |
| 1485 | DMPC15221359_Speleonectes tulumensis_1 | hypothetical protein DAPPUDRAFT_196945   | 333 | 5.77E-57 | 68.70% | -   | 0  | IPR002007; IPR010255; PTHR11475 (PANTHER), tmhmm (TMHMM)  |
| 1486 | DMPC15221387_Speleonectes tulumensis_2 | ---NA---   | 152 |          |        | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1487 | DMPC15221530_Speleonectes tulumensis_2 | prolyl 3-hydroxylase 2   | 195 | 8.10E-62 | 69.80% | -   | 0  | PTHR13986 (PANTHER)   |
| 1488 | DMPC15221604_Speleonectes tulumensis_2 | trypsinogen 2  | 314 | 2.42E-36 | 76.10% | -   | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), tmhmm (TMHMM)                  |
| 1489 | DMPC15221645_Speleonectes tulumensis_1 | ame: full=annulin ame: full=protein-glutamine gamma-glutamyltransferase ame: full=transglutaminase | 337 | 1.36E-47 | 71.80% | -   | 0  | IPR002931; IPR008958; IPR013783; IPR023608; PTHR11590:SF16 (PANTHER), SSF54001 (SUPERFAMILY)                    |
| 1490 | DMPC15221773_Speleonectes tulumensis_2 | ves g 5 allergen   | 228 | 1.88E-22 | 55.70% | C:extracellular region  | 1  | IPR001283; IPR014044; IPR018244   |
| 1491 | DMPC15221997_Speleonectes tulumensis_2 | female neotenic-specific protein 3   | 158 | 3.91E-12 | 54.00% | -   | 0  | tmhmm (TMHMM)   |
| 1492 | DMPC15222030_Speleonectes tulumensis_2 | hypothetical protein DAPPUDRAFT_241333   | 199 | 1.38E-07 | 45.33% | -   | 0  | IPR001073; IPR008983; PTHR22923 (PANTHER), PTHR22923:SF1 (PANTHER)  |
| 1493 | DMPC15222035_Speleonectes tulumensis_2 | hemagglutinin amebocyte aggregation factor-like  | 131 | 2.89E-13 | 63.90% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1494 | DMPC15222087_Speleonectes tulumensis_2 | nidogen-related basement membrane protein  | 237 | 8.97E-08 | 45.00% | -   | 0  | IPR000716; IPR009168; tmhmm (TMHMM)   |
| 1495 | DMPC15222121_Speleonectes tulumensis_1 | ---NA---   | 111 |          |        | -   | 0  | IPR003172; PTHR11306 (PANTHER)  |
| 1496 | DMPC15222220_Speleonectes tulumensis_1 | collagen alpha type  | 323 | 1.23E-65 | 62.80% | P:anatomical structure morphogenesis; P:cellular component organization; P:cell differentiation; P:multicellular organismal development; C:nucleus; C:mitochondrion   | 6  | IPR010515; IPR016186; IPR016187; PTHR24637 (PANTHER), PTHR24637:SF88 (PANTHER)                                  |

|      |  |   |     |          |        |   |   |   |
|------|--|---|-----|----------|--------|---|---|---|
| 1497 | DMPC15222233_Speleonectes_tulumensis_1 | carboxypeptidase a1-like                        | 141 | 1.03E-25 | 71.90% | P:proteolysis; F:metallocarboxypeptidase activity; F:zinc ion binding   | 3 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)  |
| 1498 | DMPC15222256_Speleonectes_tulumensis_1 | trypsin-like serine proteinase 1                | 83  | 1.73E-09 | 65.70% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                          |
| 1499 | DMPC15222305_Speleonectes_tulumensis_2 | exostosin-2                                     | 127 | 2.41E-73 | 93.00% | F:transferase activity; C:endoplasmic reticulum   | 2 | IPR015338; G3DSA:3.90.550.10 (GENE3D), PTHR11062 (PANTHER), PTHR11062:SF6 (PANTHER), SSF53448 (SUPERFAMILY)                             |
| 1500 | DMPC15222396_Speleonectes_tulumensis_0 | anti-lipoplysaccharide factor isoform 7         | 153 | 7.82E-29 | 67.20% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1501 | DMPC15222547_Speleonectes_tulumensis_2 | trypsin-1 precursor                             | 85  | 8.84E-09 | 55.40% | P:proteolysis; F:serine-type endopeptidase activity; C:extracellular region   | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1502 | DMPC15222555_Speleonectes_tulumensis_1 | serine protease 52-like                         | 121 | 6.55E-17 | 63.00% | F:peptidase activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1503 | DMPC15222682_Speleonectes_tulumensis_1 | ubiquitin-40s ribosomal protein s27a-like       | 113 | 2.38E-50 | 96.40% | C:ribosome; F:structural molecule activity; P:translation   | 3 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                      |
| 1504 | DMPC15222702_Speleonectes_tulumensis_0 | chitinase partial                               | 56  | 2.71E-14 | 64.90% | -   | 0 | IPR001223; G3DSA:3.10.50.10 (GENE3D), PTHR24833 (PANTHER), PTHR24833:SF3 (PANTHER), SSF54556 (SUPERFAMILY)                              |
| 1505 | DMPC15222734_Speleonectes_tulumensis_1 | si:dkey- protein                                | 115 | 3.49E-08 | 61.60% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1506 | DMPC15222763_Speleonectes_tulumensis_1 | aael007448- partial                             | 258 | 1.69E-57 | 71.60% | P:proteolysis; F:serine-type peptidase activity; C:membrane   | 3 | IPR001375; G3DSA:3.40.50.1820 (GENE3D), PTHR11731 (PANTHER), PTHR11731:SF23 (PANTHER), SSF53474 (SUPERFAMILY)                           |
| 1507 | DMPC15222805_Speleonectes_tulumensis_2 | epidermal retinol dehydrogenase 2-like          | 216 | 4.20E-37 | 69.50% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding   | 4 | IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 1508 | DMPC15222836_Speleonectes_tulumensis_1 | ---NA---  | 133 |          |        | -   | 0 | IPR024276; tmhmm (TMHMM)  |
| 1509 | DMPC15222875_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor             | 95  | 8.27E-47 | 76.30% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1510 | DMPC15222902_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 126 | 1.19E-20 | 50.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; PTHR12352 (PANTHER)  |
| 1511 | DMPC15222930_Speleonectes_tulumensis_1 | dermatopontin 3                                 | 125 | 6.18E-10 | 56.30% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1512 | DMPC15222937_Speleonectes_tulumensis_0 | si:dkey- protein                                | 107 | 2.82E-09 | 61.17% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1513 | DMPC15222993_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4        | 100 | 6.17E-14 | 66.00% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 1514 | DMPC15223001_Speleonectes_tulumensis_2 | apolipoprotein d-like isoform 2                 | 154 | 2.64E-16 | 61.20% | F:lipid binding; P:transport; F:transporter activity  | 3 | IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                                |
| 1515 | DMPC15223049_Speleonectes_tulumensis_1 | carboxypeptidase b                              | 202 | 2.17E-57 | 67.30% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion  | 4 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)  |
| 1516 | DMPC15223133_Speleonectes_tulumensis_0 | female neotenic-specific protein 3              | 149 | 5.18E-09 | 58.67% | -   | 0 | tmhmm (TMHMM)   |
| 1517 | DMPC15223134_Speleonectes_tulumensis_2 | sulfakinin-like peptide                         | 217 | 1.38E-15 | 63.33% | -   | 0 | IPR013152; tmhmm (TMHMM)  |

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|------|--|---|-----|----------|--------|---|----|---|
| 1518 | DMPC15223138_Speleonectes_tulumensis_1 | proclotting enzyme  | 318 | 1.46E-32 | 52.00% | -   | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                 |
| 1519 | DMPC15223148_Speleonectes_tulumensis_0 | apolipoprotein d  | 372 | 2.83E-08 | 45.30% | P:response to external stimulus; P:response to stress; P:biological process; P:regulation of biological process; C:cytoplasm  | 5  | IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER)  |
| 1520 | DMPC15223202_Speleonectes_tulumensis_1 | group 3 secretory phospholipase a2                        | 182 | 4.84E-52 | 72.30% | F:phospholipase A2 activity; F:calcium ion binding; P:lipid catabolic process   | 3  | IPR001211; IPR016090; PTHR12253:SF5 (PANTHER)   |
| 1521 | DMPC15223275_Speleonectes_tulumensis_0 | sifa preprohormone  | 105 | 8.74E-18 | 73.80% | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1522 | DMPC15223276_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                       | 142 | 2.69E-63 | 68.00% | -   | 0  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1523 | DMPC15223328_Speleonectes_tulumensis_2 | ---NA---  | 200 |          |        | -   | 0  | IPR016179; tmhmm (TMHMM)  |
| 1524 | DMPC15223336_Speleonectes_tulumensis_1 | kazal-type protease inhibitor                             | 107 | 1.15E-13 | 55.90% | -   | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 1525 | DMPC15223371_Speleonectes_tulumensis_0 | histone -like   | 130 | 8.66E-66 | 97.40% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4  | IPR000558; IPR007125; IPR009072   |
| 1526 | DMPC15223495_Speleonectes_tulumensis_1 | trypsinogen 2   | 140 | 1.50E-26 | 66.00% | -   | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)  |
| 1527 | DMPC15223514_Speleonectes_tulumensis_2 | dermatopontin 3   | 95  | 4.14E-08 | 66.50% | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1528 | DMPC15223519_Speleonectes_tulumensis_2 | cathepsin 1   | 216 | 1.65E-33 | 85.60% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)              |
| 1529 | DMPC15223546_Speleonectes_tulumensis_1 | trypsin   | 121 | 1.53E-29 | 62.00% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)   |
| 1530 | DMPC15223554_Speleonectes_tulumensis_1 | epididymal secretory protein e1                           | 214 | 3.22E-19 | 59.90% | -   | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 1531 | DMPC15223655_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor                | 144 | 2.61E-22 | 60.50% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1532 | DMPC15223668_Speleonectes_tulumensis_0 | dopamine beta hydroxylase                                 | 161 | 4.46E-35 | 60.20% | F:catalytic activity  | 1  | IPR000323; IPR000945; IPR008977; IPR014784; PF03712 (PFAM)  |
| 1533 | DMPC15223674_Speleonectes_tulumensis_2 | plasminogen activator spa                                 | 111 | 8.84E-23 | 64.80% | -   | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP)                                       |
| 1534 | DMPC15223688_Speleonectes_tulumensis_0 | adp ribosylation factor isoform a                         | 161 | 2.27E-57 | 92.40% | F:signal transducer activity; F:signal transduction; C:intracellular; P:cellular protein modification process; P:transport; P:cell-cell signaling; F:hydrolase activity; F:transferase activity; P:multicellular organismal development; P:cellular component organization; P:protein transport; F:nucleotide binding | 12 | IPR005225; IPR006689; IPR024156; IPR027417; G3DSA:3.40.50.300 (GENE3D), PTHR11711 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1535 | DMPC15223743_Speleonectes_tulumensis_1 | insulin-like growth factor binding protein 7-like protein | 216 | 7.07E-07 | 57.00% | -   | 0  | IPR000867; IPR011390; SignalP-NN(euk) (SIGNALP)   |
| 1536 | DMPC15223786_Speleonectes_tulumensis_3 | lysosomal acid  | 133 | 1.15E-12 | 64.10% | F:hydrolase activity; P:transport; P:cellular component organization  | 3  | IPR000560; G3DSA:3.40.50.1240 (GENE3D), PTHR11567 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53254 (SUPERFAMILY)         |
| 1537 | DMPC15223789_Speleonectes_tulumensis_2 | enolase   | 166 | 1.58E-65 | 95.00% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process  | 7  | IPR000941; IPR020809; IPR020810; G3DSA:3.20.20.120 (GENE3D), SSF51604 (SUPERFAMILY)   |

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|------|--|--|-----|----------|--------|--|----|---|
| 1538 | DMPC15223816_Speleonectes_tulumensis_2 | ame: full=techlectin-5a flags: precursor | 305 | 7.02E-58 | 67.50% | -  | 0  | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)   |
| 1539 | DMPC15223859_Speleonectes_tulumensis_1 | ensangp00000031746-like protein          | 112 | 9.81E-65 | 91.90% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF41 (PANTHER) IPR025733; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), tmhmm (TMHMM), SSF56300 (SUPERFAMILY) |
| 1540 | DMPC15223871_Speleonectes_tulumensis_0 | iron zinc purple acid phosphatase-like   | 207 | 4.14E-23 | 78.00% | F:binding; F:hydrolase activity  | 2  | IPR002634; PTHR12735 (PANTHER)  |
| 1541 | DMPC15223916_Speleonectes_tulumensis_0 | bola-like protein 2-like                 | 136 | 2.27E-35 | 81.00% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1542 | DMPC15223944_Speleonectes_tulumensis_2 | ---NA---                                 | 115 |          |        | -  | 0  |   |
| 1543 | DMPC15223983_Speleonectes_tulumensis_2 | lysyl-trna synthetase-like isoform 2     | 228 | 4.77E-35 | 78.20% | C:cytoplasm; F:nucleic acid binding; F:catalytic activity; P:nucleobase-containing compound metabolic process; P:translation; ; F:nucleotide binding   | 7  | IPR002313; IPR004365; IPR012340; IPR018150  |
| 1544 | DMPC15223985_Speleonectes_tulumensis_2 | phosphoglucose isomerase                 | 66  | 8.50E-19 | 76.80% | P:carbohydrate metabolic process; F:catalytic activity   | 2  | IPR001672; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER), SSF53697 (SUPERFAMILY)  |
| 1545 | DMPC15224008_Speleonectes_tulumensis_2 | ---NA---                                 | 161 |          |        | -  | 0  | IPR012336; IPR019479; PTHR10681 (PANTHER), tmhmm (TMHMM)  |
| 1546 | DMPC15224066_Speleonectes_tulumensis_0 | trypsin-like serine proteinase 1         | 131 | 3.77E-12 | 53.20% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1547 | DMPC15224083_Speleonectes_tulumensis_2 | 60s ribosomal protein l40                | 140 | 8.33E-43 | 97.40% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)  |
| 1548 | DMPC15224105_Speleonectes_tulumensis_0 | cathepsin 12                             | 154 | 5.81E-31 | 85.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 1549 | DMPC15224202_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor           | 142 | 9.02E-31 | 68.10% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1550 | DMPC15224246_Speleonectes_tulumensis_2 | vitellogenin 2                           | 128 | 4.77E-15 | 58.50% | -  | 0  | IPR001747; IPR011030; PTHR23345 (PANTHER)   |
| 1551 | DMPC15224257_Speleonectes_tulumensis_1 | mantle protein 9                         | 159 | 2.16E-08 | 66.33% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)  |
| 1552 | DMPC15224269_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase | 137 | 3.49E-35 | 65.10% | F:catalytic activity; F:nucleotide binding   | 2  | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), PTHR10836:SF4 (PANTHER), SSF55347 (SUPERFAMILY)   |
| 1553 | DMPC15224283_Speleonectes_tulumensis_2 | lipophorin receptor isoform e            | 245 | 2.04E-10 | 58.30% | C:plasma membrane  | 1  | IPR002172; IPR023415; PR00261 (PRINTS), PTHR24652 (PANTHER), PTHR24652:SF0 (PANTHER)  |

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|------|--|--|-----|----------|--------|--|----|--|
| 1554 | DMPC15224328_Speleonectes_tulumensis_2 | mantle protein 9                           | 150 | 1.21E-08 | 66.75% | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1555 | DMPC15224428_Speleonectes_tulumensis_0 | ---NA---                                   | 128 |          |        | -  | 0  | SignalP-NN(euk) (SIGNALP)  |
| 1556 | DMPC15224448_Speleonectes_tulumensis_2 | tissue factor pathway inhibitor 2          | 95  | 4.77E-26 | 63.40% | F:serine-type endopeptidase inhibitor activity; C:extracellular space; P:blood coagulation   | 3  | IPR002223; IPR020901; PTHR10083 (PANTHER)  |
| 1557 | DMPC15224478_Speleonectes_tulumensis_1 | carboxypeptidase b-like                    | 228 | 5.11E-52 | 68.70% | -  | 0  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 1558 | DMPC15224496_Speleonectes_tulumensis_0 | thioredoxin-like protein                   | 189 | 2.72E-28 | 84.10% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process   | 5  | IPR005746; IPR012336; IPR013766; tmhmm (TMHMM)   |
| 1559 | DMPC15224500_Speleonectes_tulumensis_0 | lysozyme precursor                         | 103 | 1.61E-25 | 64.80% | F:lysozyme activity; P:cell wall macromolecule catabolic process   | 2  | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1560 | DMPC15224526_Speleonectes_tulumensis_2 | proactivator polypeptide                   | 135 | 1.18E-20 | 55.10% | P:lipid metabolic process; P:sphingolipid metabolic process; C:lysosome  | 3  | IPR007856; IPR008138; IPR008139; IPR011001; PTHR11480 (PANTHER), PTHR11480:SF3 (PANTHER)   |
| 1561 | DMPC15224561_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200     | 147 | 1.01E-07 | 52.00% | -  | 0  | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1562 | DMPC15224610_Speleonectes_tulumensis_0 | ---NA---                                   | 112 |          |        | -  | 0  | IPR007233; tmhmm (TMHMM)   |
| 1563 | DMPC15224619_Speleonectes_tulumensis_2 | lysozyme c precursor                       | 138 | 4.76E-12 | 73.20% | F:hydrolase activity; P:metabolic process  | 2  | IPR001916; IPR019799; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER)   |
| 1564 | DMPC15224696_Speleonectes_tulumensis_1 | trypsin-like serine proteinase 1           | 154 | 1.74E-22 | 66.40% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                          |
| 1565 | DMPC15224730_Speleonectes_tulumensis_0 | 60s ribosomal protein l40                  | 115 | 1.64E-41 | 96.90% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)                    |
| 1566 | DMPC15224747_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor | 252 | 5.78E-26 | 61.50% | -  | 0  | IPR026645  |
| 1567 | DMPC15224762_Speleonectes_tulumensis_3 | vitellogenin 2                             | 231 | 9.01E-27 | 53.00% | -  | 0  | IPR001747; IPR011030   |
| 1568 | DMPC15224786_Speleonectes_tulumensis_1 | isoform h                                  | 380 | 3.70E-29 | 68.50% | F:hydrolase activity; P:carbohydrate metabolic process   | 2  | IPR001223; IPR002557; IPR013781; IPR017853; PTHR11177 (PANTHER), tmhmm (TMHMM)   |
| 1569 | DMPC15224814_Speleonectes_tulumensis_0 | oxidase peroxidase                         | 195 | 2.47E-53 | 66.10% | -  | 0  | IPR002007; IPR010255; PTHR11475 (PANTHER)  |
| 1570 | DMPC15224852_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor        | 181 | 2.37E-19 | 82.00% | -  | 0  | IPR005203; IPR013788; IPR014756  |
| 1571 | DMPC15224867_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor             | 204 | 1.09E-19 | 66.50% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |



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|------|--|--|-----|----------|--------|---|---|--|
| 1572 | DMPC15224898_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor  | 150 | 5.50E-20 | 50.80% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities         | 4 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1573 | DMPC15224945_Speleonectes_tulumensis_1 | ecdysteroid-regulated 16 kda protein   | 186 | 5.85E-17 | 54.50% | -   | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1574 | DMPC15224971_Speleonectes_tulumensis_2 | perlucin 5   | 155 | 1.91E-11 | 49.30% | F:carbohydrate binding; P:cell adhesion   | 2 | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1575 | DMPC15224981_Speleonectes_tulumensis_0 | h-2 class ii histocompatibility antigen gamma chain  | 145 | 1.30E-08 | 67.60% | -   | 0 | IPR000716; IPR022339   |
| 1576 | DMPC15224994_Speleonectes_tulumensis_1 | alkaline serine exoprotease a  | 152 | 4.50E-13 | 62.50% | F:peptidase activity  | 1 | IPR007280; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1577 | DMPC15225135_Speleonectes_tulumensis_2 | carboxypeptidase b-like  | 155 | 7.56E-26 | 69.10% | F:peptidase activity  | 1 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 1578 | DMPC15225140_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor  | 157 | 1.65E-63 | 70.10% | -   | 0 | IPR005203; IPR013788; IPR014756  |
| 1579 | DMPC15225186_Speleonectes_tulumensis_1 | diuretic hormone class 2-like  | 124 | 2.27E-10 | 63.00% | -   | 0 | tmhmm (TMHMM)  |
| 1580 | DMPC15225195_Speleonectes_tulumensis_2 | thioredoxin 1  | 133 | 3.22E-42 | 84.00% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process                            | 5 | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-NN(euk) (SIGNALP)  |
| 1581 | DMPC15225216_Speleonectes_tulumensis_1 | glutathione peroxidase   | 374 | 2.41E-58 | 64.20% | F:catalytic activity  | 1 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1582 | DMPC15225286_Speleonectes_tulumensis_2 | phospholipase a2-like  | 227 | 1.02E-25 | 50.30% | F:phospholipase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region; F:hydrolase activity | 6 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1583 | DMPC15225298_Speleonectes_tulumensis_1 | fimfamamide-related neuropeptides-like   | 148 | 2.43E-16 | 75.90% | -   | 0 | tmhmm (TMHMM)  |
| 1584 | DMPC15225306_Speleonectes_tulumensis_0 | trypsinogen 2  | 229 | 1.07E-78 | 70.50% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1585 | DMPC15225308_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor  | 152 | 9.71E-25 | 78.20% | -   | 0 | IPR005204; IPR013788; PTHR11511:SF19 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1586 | DMPC15225483_Speleonectes_tulumensis_0 | epididymal secretory protein e1 precursor  | 139 | 1.11E-17 | 59.80% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding  | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1587 | DMPC15225519_Speleonectes_tulumensis_1 | flavin-dependent monooxygenase fmo3b   | 100 | 1.99E-26 | 70.20% | F:catalytic activity; F:binding; F:nucleotide binding   | 3 | IPR020946; G3DSA:3.50.50.60 (GENE3D), PTHR23023 (PANTHER), PTHR23023:SF4 (PANTHER), SSF51905 (SUPERFAMILY)                                       |
| 1588 | DMPC15225581_Speleonectes_tulumensis_1 | ectonucleotide pyrophosphatase phosphodiesterase family member 6   | 114 | 3.57E-23 | 51.40% | P:metabolic process; F:catalytic activity; C:integral to membrane; F:hydrolase activity; C:membrane; P:lipid catabolic process; C:plasma membrane             | 7 | IPR002591; IPR017849; IPR017850; IPR024873   |
| 1589 | DMPC15225607_Speleonectes_tulumensis_0 | ves g 5 allergen   | 239 | 2.45E-24 | 50.90% | C:extracellular region  | 1 | IPR001283; IPR002413; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1590 | DMPC15225642_Speleonectes_tulumensis_0 | a chain crystal spectroscopic and catalytic properties of cobalt copper nickel and mercury derivatives of the zinc endopeptidase a correlation of structure and proteolytic activity | 149 | 9.39E-19 | 53.40% | F:peptidase activity  | 1 | IPR001506; IPR006026; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF55486 (SUPERFAMILY) |

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| 1591 | DMPC15225643_Speleonectes_tulumensis_1 | netrin- partial   | 150 | 8.20E-13 | 78.90% | P:anatomical structure morphogenesis; P:cellular component organization; P:cell differentiation; P:multicellular organismal development; F:receptor binding; C:proteinaceous extracellular matrix; P:regulation of biological process; P:biological_process; C:Golgi apparatus; P:cell proliferation | 10 | IPR008993; IPR018933; G3DSA:2.40.50.120 (GENE3D), PTHR10574 (PANTHER), PTHR10574:SF44 (PANTHER)  |
| 1592 | DMPC15225649_Speleonectes_tulumensis_2 | 26kda protease  | 122 | 9.66E-16 | 60.40% | F:hydrolase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 1593 | DMPC15225693_Speleonectes_tulumensis_0 | ecdysteroid-regulated 16 kda protein                                  | 146 | 3.05E-13 | 55.60% | -  | 0  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1594 | DMPC15225706_Speleonectes_tulumensis_1 | serine protease 82 precursor  | 118 | 1.41E-11 | 59.75% | F:hydrolase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1595 | DMPC15225810_Speleonectes_tulumensis_1 | cathepsin d   | 134 | 6.36E-45 | 78.50% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR001461; IPR001969; IPR012848; IPR021109; PTHR13683:SF84 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1596 | DMPC15225814_Speleonectes_tulumensis_1 | peptidyl-prolyl cis-trans rhodopsin-specific isozyme-like             | 121 | 8.96E-33 | 73.90% | F:peptidyl-prolyl cis-trans isomerase activity; P:protein folding; P:protein peptidyl-prolyl isomerization; F:isomerase activity   | 4  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF168 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1597 | DMPC15225821_Speleonectes_tulumensis_2 | aminoacyl trna synthase complex-interacting multifunctional protein 1 | 141 | 3.97E-10 | 66.80% | P:biological_process; F:binding; C:organelle; C:intracellular; P:primary metabolic process; C:cytoplasm  | 6  | no IPS match   |
| 1598 | DMPC15225971_Speleonectes_tulumensis_1 | amine oxidase   | 408 | 2.10E-41 | 65.10% | C:mitochondrion; F:oxidoreductase activity; P:dopamine catabolic process   | 3  | IPR001613; IPR002937; G3DSA:3.50.50.60 (GENE3D), G3DSA:3.90.660.10 (GENE3D), PTHR10742 (PANTHER), PTHR10742:SF5 (PANTHER), tmhmm (TMHMM), SSF51905 (SUPERFAMILY), SSF54373 (SUPERFAMILY) |
| 1599 | DMPC15225978_Speleonectes_tulumensis_1 | cathepsin I precursor   | 142 | 1.03E-22 | 87.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 1600 | DMPC15226006_Speleonectes_tulumensis_2 | ectonucleotide pyrophosphatase phosphodiesterase family member 5      | 121 | 1.62E-25 | 56.80% | P:metabolic process; F:catalytic activity  | 2  | IPR002591; IPR017850; IPR024873  |
| 1601 | DMPC15226057_Speleonectes_tulumensis_2 | trypsin-like serine proteinase 1                                      | 129 | 4.53E-13 | 52.50% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1602 | DMPC15226078_Speleonectes_tulumensis_2 | serine protease precursor   | 156 | 2.45E-18 | 59.90% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding  | 4  | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 1603 | DMPC15226183_Speleonectes_tulumensis_2 | endothelin-converting enzyme  | 190 | 3.80E-86 | 83.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000718; IPR018497; IPR024079; PTHR11733:SF31 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 1604 | DMPC15226214_Speleonectes_tulumensis_0 | GM15238   | 131 | 6.73E-12 | 59.90% | P:oxidation-reduction process; F:heme binding; P:response to oxidative stress; F:peroxidase activity   | 4  | IPR002007; IPR010255; PTHR11475 (PANTHER), PTHR11475:SF7 (PANTHER), tmhmm (TMHMM)  |
| 1605 | DMPC15226362_Speleonectes_tulumensis_1 | cd74 major histocompatibility class ii invariant chain a              | 126 | 1.37E-07 | 67.67% | P:multicellular organismal development   | 1  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1606 | DMPC15226378_Speleonectes_tulumensis_2 | chitinase partial   | 112 | 6.79E-19 | 87.00% | F:hydrolase activity; F:binding; P:carbohydrate metabolic process; P:catabolic process   | 4  | IPR001223; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1607 | DMPC15226407_Speleonectes_tulumensis_0 | ---NA---  | 150 |          |        | -  | 0  | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1608 | DMPC15226433_Speleonectes_tulumensis_2 | epididymal secretory protein e1 isoform 1                             | 143 | 1.90E-23 | 57.90% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

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| 1609 | DMPC15226450_Speleonectes_tulumensis_1 | ---NA---   | 107 | -        | 0      | IPR026645; SignalP-NN(euk) (SIGNALP)   |   |  |
| 1610 | DMPC15226533_Speleonectes_tulumensis_0 | ---NA---   | 136 | -        | 0      | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21179 (PANTHER), PTHR21179:SF0 (PANTHER), SSF100895 (SUPERFAMILY)                            |   |  |
| 1611 | DMPC15226567_Speleonectes_tulumensis_0 | glutathione peroxidase 7                                 | 115 | 8.38E-33 | 77.60% | C:extracellular region; F:catalytic activity; F:antioxidant activity; P:response to stress; P:metabolic process                        | 5 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1612 | DMPC15226625_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200                   | 146 | 1.20E-08 | 50.00% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1613 | DMPC15226639_Speleonectes_tulumensis_1 | cathepsin 1  | 160 | 4.10E-39 | 85.50% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                     |
| 1614 | DMPC15226707_Speleonectes_tulumensis_1 | epididymal secretory protein e1 precursor                | 153 | 1.86E-26 | 58.10% | -  | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1615 | DMPC15226713_Speleonectes_tulumensis_2 | cathepsin 1  | 36  | 6.27E-13 | 87.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                               |
| 1616 | DMPC15226772_Speleonectes_tulumensis_0 | dermatopontin 3  | 105 | 3.58E-07 | 58.60% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1617 | DMPC15226781_Speleonectes_tulumensis_1 | membrane metallo-endopeptidase-like 1-like               | 112 | 5.47E-20 | 71.10% | P:proteolysis; F:hydrolase activity; F:metalloendopeptidase activity   | 3 | IPR000718; IPR018497; IPR024079; PTHR11733:SF31 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 1618 | DMPC15226810_Speleonectes_tulumensis_1 | perlucin 5   | 146 | 1.05E-11 | 50.00% | F:binding  | 1 | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1619 | DMPC15226861_Speleonectes_tulumensis_0 | dermatopontin 2  | 111 | 2.24E-08 | 61.25% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1620 | DMPC15226905_Speleonectes_tulumensis_2 | ---NA---   | 140 | -        | -      | -  | 0 | IPR001283; IPR014044   |
| 1621 | DMPC15227056_Speleonectes_tulumensis_2 | muscle-specific protein 20                               | 141 | 2.14E-46 | 74.40% | -  | 0 | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER)   |
| 1622 | DMPC15227064_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor               | 354 | 1.29E-38 | 60.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1623 | DMPC15227175_Speleonectes_tulumensis_0 | epididymal secretory protein e1                          | 153 | 4.54E-11 | 63.80% | P:transport; F:binding; C:intracellular  | 3 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1624 | DMPC15227215_Speleonectes_tulumensis_2 | thioredoxin 2  | 123 | 1.67E-24 | 70.70% | P:cell redox homeostasis; F:electron carrier activity; P:glycerol ether metabolic process; F:protein disulfide oxidoreductase activity | 4 | IPR005746; IPR012336; IPR013766; PTHR10438:SF13 (PANTHER)  |
| 1625 | DMPC15227279_Speleonectes_tulumensis_1 | cathepsin 1  | 151 | 3.49E-14 | 59.50% | -  | 0 | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1626 | DMPC15227325_Speleonectes_tulumensis_0 | glutathione peroxidase 1                                 | 108 | 3.09E-34 | 79.60% | F:catalytic activity; F:antioxidant activity; P:response to stress; P:metabolic process  | 4 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 1627 | DMPC15227360_Speleonectes_tulumensis_1 | ankyrin repeat and sam domain-containing protein 1a-like | 162 | 3.87E-56 | 89.90% | -  | 0 | IPR002110; IPR020683; PTHR24178 (PANTHER), PTHR24178:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1628 | DMPC15227404_Speleonectes_tulumensis_0 | trypsin 3  | 174 | 5.13E-41 | 74.50% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1629 | DMPC15227415_Speleonectes_tulumensis_1 | microfibrillar-associated protein 1-like                 | 197 | 7.26E-16 | 79.00% | -  | 0 | IPR009730; PTHR15327:SF0 (PANTHER)   |
| 1630 | DMPC15227418_Speleonectes_tulumensis_1 | serine proteinase stubble-like                           | 196 | 3.03E-45 | 55.70% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |

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|------|--|---|-----|-----------|--------|---|---|---|
| 1631 | DMPC15227420_Speleonectes_tulumensis_1 | ame: full=isotocin-neurophysin it 1 contains: ame: full=isotocin short=it contains: ame: full=neurophysin it 1 flags: precursor | 149 | 7.87E-10  | 64.50% | F:neurohypophyseal hormone activity; C:extracellular region   | 2 | IPR000981; PTHR11681:SF0 (PANTHER), tmhmm (TMHMM)   |
| 1632 | DMPC15227429_Speleonectes_tulumensis_2 | ---NA---  | 50  |           |        | -   | 0 | IPR001672; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER)  |
| 1633 | DMPC15227486_Speleonectes_tulumensis_2 | pkhd domain-containing transmembrane protein c17orf101 homolog  | 130 | 1.71E-68  | 84.60% | -   | 0 | IPR005123; PTHR14650 (PANTHER), PTHR14650:SF0 (PANTHER)   |
| 1634 | DMPC15227555_Speleonectes_tulumensis_1 | 60s ribosomal protein l40   | 124 | 5.21E-43  | 96.20% | C:ribosome; F:structural molecule activity; P:translation   | 3 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY) |
| 1635 | DMPC15227565_Speleonectes_tulumensis_1 | secreted protein, putative  | 253 | 2.16E-43  | 82.80% | F:cytoskeletal protein binding; C:cell  | 2 | IPR001050; IPR003585; PTHR10915:SF1 (PANTHER), tmhmm (TMHMM)  |
| 1636 | DMPC15227586_Speleonectes_tulumensis_5 | hemocyanin subunit type 1 precursor   | 146 | 2.42E-44  | 84.50% | -   | 0 | IPR000896; IPR008922; IPR013788; PTHR11511:SF20 (PANTHER)   |
| 1637 | DMPC15227808_Speleonectes_tulumensis_1 | zinc proteinase mpc1  | 152 | 6.26E-10  | 48.50% | -   | 0 | IPR001506; IPR024079; PTHR10127 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF55486 (SUPERFAMILY)                                   |
| 1638 | DMPC15227891_Speleonectes_tulumensis_2 | short isoform c   | 125 | 1.77E-18  | 61.50% | P:signal transduction; P:anatomical structure morphogenesis; P:multicellular organismal development; P:embryo development; P:reproduction; P:cell differentiation                     | 6 | IPR010895   |
| 1639 | DMPC15227961_Speleonectes_tulumensis_0 | projectin short variant   | 244 | 8.13E-83  | 75.30% | -   | 0 | IPR003599; IPR007110; IPR013098; IPR013783; IPR020675; SSF48726 (SUPERFAMILY)   |
| 1640 | DMPC15227988_Speleonectes_tulumensis_2 | phospholipase a2  | 146 | 6.09E-17  | 66.20% | F:hydrolase activity; P:lipid metabolic process   | 2 | IPR001211; IPR016090  |
| 1641 | DMPC15228058_Speleonectes_tulumensis_2 | cytochrome b5 domain-containing protein 2   | 152 | 1.11E-12  | 62.70% | F:heme binding  | 1 | IPR001199; PTHR10281 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1642 | DMPC15228135_Speleonectes_tulumensis_1 | ale o 1 allergen  | 157 | 4.95E-63  | 78.90% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                                 |
| 1643 | DMPC15228196_Speleonectes_tulumensis_0 | glyceraldehyde 3-phosphate dehydrogenase  | 144 | 1.19E-70  | 93.30% | C:cytoplasm; F:nucleotide binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; F:catalytic activity; P:metabolic process | 7 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)  |
| 1644 | DMPC15228211_Speleonectes_tulumensis_0 | arylsulfatase b   | 157 | 5.46E-42  | 74.20% | F:catalytic activity  | 1 | IPR000917; IPR017849; IPR017850; IPR024607; PTHR10342 (PANTHER), PTHR10342:SF19 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)           |
| 1645 | DMPC15228215_Speleonectes_tulumensis_0 | heat shock protein 70   | 387 | 5.85E-132 | 93.90% | F:nucleotide binding  | 1 | IPR013126; G3DSA:1.20.1270.10 (GENE3D), G3DSA:2.60.34.10 (GENE3D), PTHR19375 (PANTHER), SSF100920 (SUPERFAMILY), SSF100934 (SUPERFAMILY)      |
| 1646 | DMPC15228230_Speleonectes_tulumensis_2 | cathepsin 1   | 109 | 1.44E-33  | 83.30% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                      |
| 1647 | DMPC15228248_Speleonectes_tulumensis_0 | ---NA---  | 150 |           |        | -   | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER)  |
| 1648 | DMPC15228276_Speleonectes_tulumensis_1 | trypsin 2   | 158 | 4.20E-24  | 57.20% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)          |
| 1649 | DMPC15228343_Speleonectes_tulumensis_0 | endothelin-converting enzyme 1  | 209 | 1.50E-68  | 72.80% | -   | 0 | IPR000718; IPR018497; IPR024079; PTHR11733:SF26 (PANTHER), SSF55486 (SUPERFAMILY)   |

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|------|--|---|-----|-----------|--------|--|----|--|
| 1650 | DMPC15228357_Speleonectes_tulumensis_0 | protein disulfide-isomerase a4-like                         | 373 | 1.72E-102 | 73.20% | P:cell redox homeostasis   | 1  | IPR012336; IPR013766; PTHR18929 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1651 | DMPC15228360_Speleonectes_tulumensis_1 | stromal cell-derived factor 2-like protein 1-like isoform 1 | 110 | 5.63E-28  | 74.80% | C:cell; F:transferase activity   | 2  | IPR016093; IPR027005; G3DSA:2.80.10.50 (GENE3D), SignalP-NN(euk) (SIGNALP)   |
| 1652 | DMPC15228378_Speleonectes_tulumensis_1 | trypsin   | 102 | 2.86E-17  | 66.90% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24257 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                    |
| 1653 | DMPC15228380_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase                    | 160 | 2.29E-27  | 89.10% | -  | 0  | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)   |
| 1654 | DMPC15228449_Speleonectes_tulumensis_1 | glutaredoxin-3  | 100 | 2.17E-13  | 60.80% | P:cell redox homeostasis; F:electron carrier activity; F:protein disulfide oxidoreductase activity   | 3  | IPR004480; IPR012336; IPR013766; PTHR10293:SF17 (PANTHER)  |
| 1655 | DMPC15228482_Speleonectes_tulumensis_2 | cathepsin l   | 108 | 3.18E-21  | 62.10% | P:proteolysis; F:hydrolase activity; F:cysteine-type peptidase activity; F:peptidase activity  | 4  | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 1656 | DMPC15228492_Speleonectes_tulumensis_0 | protein   | 148 | 3.15E-20  | 50.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1657 | DMPC15228527_Speleonectes_tulumensis_1 | cd74 major histocompatibility class ii invariant chain a    | 145 | 7.67E-08  | 67.00% | P:multicellular organismal development   | 1  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1658 | DMPC15228541_Speleonectes_tulumensis_1 | galectin partial  | 205 | 6.73E-27  | 60.70% | F:carbohydrate binding   | 1  | IPR001079; IPR008985; IPR013320; PTHR11346 (PANTHER)   |
| 1659 | DMPC15228667_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like             | 113 | 5.05E-11  | 62.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1660 | DMPC15228681_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor             | 133 | 4.17E-19  | 52.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; PTHR12036 (PANTHER), PTHR12036:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1661 | DMPC15228686_Speleonectes_tulumensis_2 | carcinolectin 5a partial                                    | 188 | 1.28E-12  | 66.50% | -  | 0  | IPR002181; IPR014716; PTHR19143 (PANTHER), PTHR19143:SF47 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                |
| 1662 | DMPC15228714_Speleonectes_tulumensis_2 | 60s ribosomal protein l40                                   | 131 | 1.11E-46  | 98.10% | C:ribosome; F:structural molecule activity; P:translation  | 3  | IPR000626; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                      |
| 1663 | DMPC15228770_Speleonectes_tulumensis_2 | oocyte protease inhibitor-1 precursor                       | 120 | 2.16E-08  | 63.40% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1664 | DMPC15228834_Speleonectes_tulumensis_1 | 60s ribosomal protein l40                                   | 129 | 3.47E-42  | 95.30% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                           |
| 1665 | DMPC15228985_Speleonectes_tulumensis_1 | cathepsin l   | 123 | 1.28E-13  | 63.80% | -  | 0  | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 1666 | DMPC15229048_Speleonectes_tulumensis_0 | variable lymphocyte receptor                                | 143 | 5.71E-07  | 49.50% | -  | 0  | IPR001611; G3DSA:3.80.10.10 (GENE3D), PTHR24365 (PANTHER), SSF52058 (SUPERFAMILY)  |

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|------|--|--|-----|----------|--------|---|----|--|
| 1667 | DMPC15229080_Speleonectes tulumensis_2 | beta- -  | 127 | 1.29E-20 | 71.70% | F:transferase activity  | 1  | IPR003859; G3DSA:3.90.550.10 (GENE3D), PTHR19300:SF5 (PANTHER), PF13733 (PFAM), SSF53448 (SUPERFAMILY)                   |
| 1668 | DMPC15229116_Speleonectes tulumensis_2 | histone h2a  | 124 | 3.09E-47 | 90.20% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4  | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)   |
| 1669 | DMPC15229132_Speleonectes tulumensis_1 | orcokinin precursor  | 127 | 3.73E-20 | 76.40% | -   | 0  | PTHR22283 (PANTHER)  |
| 1670 | DMPC15229218_Speleonectes tulumensis_0 | oocyte protease inhibitor-1 precursor                                  | 117 | 1.10E-10 | 63.90% | P:proteolysis; F:peptidase activity   | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1671 | DMPC15229316_Speleonectes tulumensis_0 | ---NA---   | 113 |          |        | -   | 0  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1672 | DMPC15229369_Speleonectes tulumensis_1 | cd74 major histocompatibility class ii invariant chain a               | 133 | 4.00E-08 | 67.67% | P:multicellular organismal development  | 1  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1673 | DMPC15229487_Speleonectes tulumensis_2 | isoform cra_b  | 149 | 6.17E-49 | 93.20% | C:nucleoplasm; P:signal transduction; P:response to stress; P:DNA metabolic process; P:translation; F:binding; P:metabolic process; F:structural molecule activity; C:endosome; C:ribosome; C:cytosol | 11 | IPR000626; IPR002906; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)       |
| 1674 | DMPC15229530_Speleonectes tulumensis_0 | virulence metalloprotease  | 286 | 9.63E-10 | 48.60% | P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:peptidase activity; F:metalloendopeptidase activity   | 5  | IPR025711; tmhmm (TMHMM)   |
| 1675 | DMPC15229628_Speleonectes tulumensis_2 | hypothetical protein Phum_PHUM596260                                   | 148 | 7.30E-08 | 73.00% | -   | 0  | SSF57501 (SUPERFAMILY)   |
| 1676 | DMPC15229668_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor isoform 7                               | 135 | 3.85E-09 | 58.30% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1677 | DMPC15229686_Speleonectes tulumensis_1 | peroxiredoxin 1-like   | 101 | 9.74E-36 | 87.70% | P:metabolic process; F:antioxidant activity; F:catalytic activity   | 3  | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF50 (PANTHER)  |
| 1678 | DMPC15229763_Speleonectes tulumensis_2 | prophenoloxidase activating factor                                     | 135 | 3.33E-09 | 57.60% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1679 | DMPC15229917_Speleonectes tulumensis_2 | thioredoxin 1  | 86  | 1.15E-20 | 83.10% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process  | 5  | IPR005746; IPR012336; IPR013766; PTHR10438:SF127 (PANTHER), SignalP-NN(euk) (SIGNALP)                                    |
| 1680 | DMPC15229945_Speleonectes tulumensis_0 | nas-15 protein   | 145 | 1.63E-23 | 60.60% | F:hydrolase activity  | 1  | IPR001506; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)   |
| 1681 | DMPC15229970_Speleonectes tulumensis_1 | cathepsin 1  | 167 | 1.58E-56 | 78.60% | F:peptidase activity  | 1  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY) |
| 1682 | DMPC15229990_Speleonectes tulumensis_2 | beta 1-like 2  | 178 | 6.63E-26 | 61.10% | F:hydrolase activity  | 1  | IPR001944; PTHR23421:SF14 (PANTHER)  |
| 1683 | DMPC15230023_Speleonectes tulumensis_1 | ferritin   | 121 | 8.00E-23 | 88.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1684 | DMPC15230087_Speleonectes tulumensis_2 | grn protein  | 132 | 2.24E-13 | 57.40% | -   | 0  | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                        |
| 1685 | DMPC15230089_Speleonectes tulumensis_0 | uncharacterized aarf domain-containing protein kinase 1-like isoform 2 | 121 | 1.19E-26 | 72.30% | F:transferase activity  | 1  | PTHR10566 (PANTHER), PTHR10566:SF24 (PANTHER)  |
| 1686 | DMPC15230150_Speleonectes tulumensis_0 | trypsin  | 126 | 3.34E-20 | 54.00% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)   |
| 1687 | DMPC15230166_Speleonectes tulumensis_1 | hemagglutinin amebocyte aggregation factor-like                        | 114 | 9.70E-12 | 63.60% | -   | 0  | IPR026645  |
| 1688 | DMPC15230255_Speleonectes tulumensis_1 | proclotting enzyme-like  | 256 | 1.06E-46 | 55.90% | F:catalytic activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)                               |

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|------|--|---|-----|----------|--------|--|---|---|
| 1689 | DMPC15230263_Speleonectes_tulumensis_1 | epididymal secretory protein e1 isoform 1       | 146 | 2.31E-17 | 55.40% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding                   | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 1690 | DMPC15230359_Speleonectes_tulumensis_1 | hemocyanin subunit type 1 precursor             | 153 | 1.47E-37 | 72.90% | -  | 0 | IPR005203; IPR013788; IPR014756   |
| 1691 | DMPC15230408_Speleonectes_tulumensis_1 | chymotrypsin a                                  | 204 | 1.74E-26 | 60.10% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), tmhmm (TMHMM)  |
| 1692 | DMPC15230431_Speleonectes_tulumensis_2 | superoxide dismutase mitochondrial              | 92  | 1.32E-19 | 77.10% | F:binding; P:metabolic process; F:catalytic activity; P:biological_process   | 4 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)  |
| 1693 | DMPC15230517_Speleonectes_tulumensis_2 | serine-threonine kinase receptor-associated     | 132 | 3.01E-42 | 86.70% | -  | 0 | IPR001680; IPR015943; IPR017986; IPR019775; PTHR19877 (PANTHER), SSF82171 (SUPERFAMILY)   |
| 1694 | DMPC15230547_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like | 107 | 7.71E-14 | 64.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1695 | DMPC15230567_Speleonectes_tulumensis_0 | thioredoxin 1                                   | 151 | 1.39E-52 | 83.30% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process | 5 | IPR005746; IPR012336; IPR013766; IPR017937; SignalP-NN(euk) (SIGNALP)   |
| 1696 | DMPC15230596_Speleonectes_tulumensis_1 | soma ferritin                                   | 105 | 3.27E-24 | 88.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                                      | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1697 | DMPC15230637_Speleonectes_tulumensis_0 | cathepsin d                                     | 218 | 1.03E-62 | 82.10% | C:lysosome; P:protein metabolic process; P:catabolic process; F:peptidase activity   | 4 | IPR001461; IPR001969; IPR021109; PTHR13683:SF84 (PANTHER), tmhmm (TMHMM)  |
| 1698 | DMPC15230646_Speleonectes_tulumensis_1 | dermatopontin 2                                 | 133 | 3.17E-14 | 57.60% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1699 | DMPC15230722_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 140 | 2.55E-13 | 56.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 1700 | DMPC15230764_Speleonectes_tulumensis_0 | glutathione peroxidase 1                        | 124 | 1.75E-25 | 77.40% | -  | 0 | IPR000889; IPR012336  |
| 1701 | DMPC15230777_Speleonectes_tulumensis_1 | dermatopontin 2                                 | 250 | 1.43E-35 | 59.80% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1702 | DMPC15230822_Speleonectes_tulumensis_1 | vitellogenin 1                                  | 89  | 1.24E-11 | 61.57% | -  | 0 | IPR001846   |
| 1703 | DMPC15230839_Speleonectes_tulumensis_1 | hemocyanin subunit type 1 precursor             | 147 | 1.23E-55 | 68.60% | -  | 0 | IPR005204; IPR013788; PTHR11511:SF20 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1704 | DMPC15230852_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4        | 125 | 3.38E-13 | 59.50% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1705 | DMPC15230901_Speleonectes_tulumensis_2 | si:dkey- protein                                | 108 | 3.88E-10 | 59.70% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1706 | DMPC15230935_Speleonectes_tulumensis_1 | arylsulfatase b-like                            | 118 | 4.63E-18 | 89.90% | P:metabolic process; F:hydrolase activity  | 2 | IPR000917; IPR017849; IPR017850; PTHR10342 (PANTHER), PTHR10342:SF19 (PANTHER)  |
| 1707 | DMPC15231009_Speleonectes_tulumensis_1 | secretory phospholipase partial                 | 140 | 3.96E-19 | 62.30% | F:phospholipase A2 activity; F:calcium ion binding; F:hydrolase activity; P:lipid catabolic process                                | 4 | IPR001211; IPR016090; PTHR12253:SF1 (PANTHER)   |
| 1708 | DMPC15231017_Speleonectes_tulumensis_1 | cathepsin l                                     | 145 | 5.75E-67 | 78.00% | -  | 0 | IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 1709 | DMPC15231066_Speleonectes_tulumensis_2 | nk-tumor recognition protein                    | 162 | 5.92E-63 | 88.60% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; IPR020892; IPR024936; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF130 (PANTHER)   |
| 1710 | DMPC15231099_Speleonectes_tulumensis_1 | anti-lipopolsaccharide factor isoform 7         | 130 | 1.91E-27 | 68.50% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 1711 | DMPC15231216_Speleonectes_tulumensis_0 | hepatopaneas partial                            | 177 | 4.15E-37 | 73.90% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |

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|------|--|---|-----|----------|--------|--|---|---|
| 1712 | DMPC15231220_Speleonectes_tulumensis_2 | ame: full=hemagglutinin amebocyte aggregation factor ame: full=18k-laf flags: precursor | 96  | 2.79E-07 | 67.00% | -  | 0 | no IPS match  |
| 1713 | DMPC15231353_Speleonectes_tulumensis_0 | ectonucleotide pyrophosphatase phosphodiesterase family member 6                        | 138 | 1.43E-25 | 54.80% | P:metabolic process; F:catalytic activity  | 2 | IPR002591; IPR017849; IPR017850; IPR024873; PTHR10151:SF15 (PANTHER)  |
| 1714 | DMPC15231475_Speleonectes_tulumensis_1 | transmembrane protease serine 4   | 281 | 1.59E-27 | 49.60% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24258 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1715 | DMPC15231483_Speleonectes_tulumensis_1 | selenium-dependent glutathione peroxidase   | 113 | 3.16E-33 | 78.90% | -  | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)   |
| 1716 | DMPC15231495_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor  | 146 | 3.52E-23 | 59.10% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1717 | DMPC15231519_Speleonectes_tulumensis_2 | dermatopontin 3   | 104 | 4.19E-08 | 64.29% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1718 | DMPC15231572_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor  | 155 | 1.59E-30 | 68.10% | -  | 0 | IPR024509; IPR024716  |
| 1719 | DMPC15231607_Speleonectes_tulumensis_2 | histone h1  | 123 | 1.49E-27 | 82.50% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4 | IPR005818; IPR005819; IPR011991; PTHR11467 (PANTHER), PTHR11467:SF0 (PANTHER), SSF46785 (SUPERFAMILY)   |
| 1720 | DMPC15231700_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor  | 109 | 6.11E-08 | 59.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1721 | DMPC15231715_Speleonectes_tulumensis_0 | lipase 1 precursor  | 255 | 4.26E-60 | 65.60% | P:lipid metabolic process; F:hydrolase activity, acting on ester bonds; F:hydrolase activity; P:lipid catabolic process                | 4 | IPR000073; IPR006693; G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY) |
| 1722 | DMPC15231766_Speleonectes_tulumensis_1 | si:dkey- protein  | 140 | 2.01E-10 | 54.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 1723 | DMPC15231837_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like   | 138 | 2.61E-13 | 63.70% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1724 | DMPC15231940_Speleonectes_tulumensis_0 | thioredoxin 2   | 165 | 1.49E-30 | 69.80% | P:cell redox homeostasis; F:electron carrier activity; P:glycerol ether metabolic process; F:protein disulfide oxidoreductase activity | 4 | IPR005746; IPR012336; IPR013766; PTHR10438:SF13 (PANTHER)   |
| 1725 | DMPC15231975_Speleonectes_tulumensis_1 | plasma glutamate carboxypeptidase-like  | 195 | 1.31E-46 | 70.80% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | G3DSA:3.40.630.10 (GENE3D), PTHR12053 (PANTHER), PTHR12053:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1726 | DMPC15231985_Speleonectes_tulumensis_1 | von willebrand factor d and egf domain-containing protein                               | 112 | 2.33E-24 | 59.30% | F:calcium ion binding  | 1 | IPR000742; IPR013032; G3DSA:2.170.300.10 (GENE3D), PTHR24044 (PANTHER), SSF57196 (SUPERFAMILY)  |
| 1727 | DMPC15232110_Speleonectes_tulumensis_0 | membrane glycoprotein lig-  | 235 | 6.94E-08 | 48.00% | F:hydrolase activity; F:phosphoprotein phosphatase activity  | 2 | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR24369 (PANTHER), SSF52058 (SUPERFAMILY)  |
| 1728 | DMPC15232178_Speleonectes_tulumensis_1 | multiple coagulation factor deficiency protein 2 homolog                                | 289 | 1.05E-21 | 65.00% | -  | 0 | IPR011992; IPR018247; PTHR23104 (PANTHER), PTHR23104:SF0 (PANTHER), SSF47473 (SUPERFAMILY)  |
| 1729 | DMPC15232232_Speleonectes_tulumensis_1 | dermatopontin 3   | 103 | 4.29E-08 | 59.13% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1730 | DMPC15232237_Speleonectes_tulumensis_2 | dermatopontin 2   | 104 | 1.51E-08 | 65.70% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1731 | DMPC15232241_Speleonectes_tulumensis_1 | serine protease precursor   | 149 | 5.34E-16 | 59.30% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding          | 4 | IPR007280; SignalP-NN(euk) (SIGNALP)  |
| 1732 | DMPC15232248_Speleonectes_tulumensis_2 | 60s ribosomal protein l40   | 151 | 5.48E-42 | 96.00% | C:ribosome; F:structural molecule activity; P:translation  | 3 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF54236 (SUPERFAMILY)                     |



|      |  |  |     |          |        |  |   |   |
|------|--|--|-----|----------|--------|--|---|---|
| 1733 | DMPC15232279_Speleonectes_tulumensis_2 | ame: full=venom allergen 5 ame: full=allergen ves s v ame: full=antigen 5 short=ag5 ame: full=cysteine-rich venom protein short=crvp ame: allergen=ves s 5 | 192 | 7.30E-18 | 61.50% | -  | 0 | IPR001283; IPR002413; IPR014044; SignalP-NN(euk) (SIGNALP)  |
| 1734 | DMPC15232341_Speleonectes_tulumensis_1 | chymotrypsin-like elastase family member 2a-like   | 138 | 1.35E-10 | 60.10% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1735 | DMPC15232358_Speleonectes_tulumensis_2 | dnaj homolog subfamily c member 24   | 120 | 3.59E-14 | 64.20% | F:binding  | 1 | IPR001623; PTHR24078 (PANTHER)  |
| 1736 | DMPC15232430_Speleonectes_tulumensis_0 | mantle protein 9   | 138 | 1.30E-08 | 67.00% | -  | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY) |
| 1737 | DMPC15232478_Speleonectes_tulumensis_0 | hyaluronidase precursor  | 271 | 2.83E-67 | 62.60% | P:defense response; P:carbohydrate metabolic process; F:hyaluronoglucosaminidase activity; F:catalytic activity  | 4 | IPR001329; IPR013785; IPR017853; IPR018155; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1738 | DMPC15232500_Speleonectes_tulumensis_1 | hemocyanin subunit type 2 precursor  | 159 | 1.09E-27 | 77.80% | -  | 0 | IPR005203; IPR013788; IPR014756; tmhmm (TMHMM)  |
| 1739 | DMPC15232506_Speleonectes_tulumensis_2 | dermatopontin 2  | 124 | 4.00E-08 | 59.38% | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1740 | DMPC15232564_Speleonectes_tulumensis_0 | oxidase peroxidase   | 172 | 1.36E-51 | 63.90% | -  | 0 | IPR002007; IPR010255; PTHR11475 (PANTHER)   |
| 1741 | DMPC15232588_Speleonectes_tulumensis_2 | venom allergen 5   | 150 | 2.09E-20 | 54.40% | -  | 0 | IPR001283; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1742 | DMPC15232590_Speleonectes_tulumensis_1 | zinc finger  | 154 | 8.71E-20 | 56.30% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3 | IPR007087; IPR013087; IPR015880; PTHR24402 (PANTHER), PTHR24402:SF54 (PANTHER), PF13894 (PFAM), SSF57667 (SUPERFAMILY)                            |
| 1743 | DMPC15232692_Speleonectes_tulumensis_0 | clipb6 protein   | 116 | 8.63E-12 | 62.00% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1744 | DMPC15232731_Speleonectes_tulumensis_2 | oocyte protease inhibitor-1 precursor  | 88  | 1.43E-10 | 66.90% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1745 | DMPC15232755_Speleonectes_tulumensis_2 | iron zinc purple acid phosphatase-like   | 118 | 2.88E-12 | 60.30% | F:metal ion binding; F:hydrolase activity; F:acid phosphatase activity   | 3 | IPR008963; IPR015914; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1746 | DMPC15232757_Speleonectes_tulumensis_1 | soma ferritin  | 115 | 6.46E-34 | 87.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1747 | DMPC15232764_Speleonectes_tulumensis_1 | retinal dehydrogenase 1  | 125 | 2.94E-51 | 81.30% | C:cytoplasm; F:catalytic activity; P:lipid metabolic process; P:secondary metabolic process; P:metabolic process   | 5 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 1748 | DMPC15232765_Speleonectes_tulumensis_2 | nas-15 protein   | 272 | 4.63E-44 | 54.00% | F:metal ion binding; P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:zinc ion binding; F:peptidase activity; F:metalloendopeptidase activity | 7 | IPR001506; IPR006026; IPR024079; PTHR10127 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)   |
| 1749 | DMPC15232859_Speleonectes_tulumensis_1 | female neotenic-specific protein 3   | 116 | 1.80E-08 | 66.50% | -  | 0 | no IPS match  |
| 1750 | DMPC15232922_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_57749  | 129 | 9.02E-45 | 75.30% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF33 (PANTHER)  |
| 1751 | DMPC15232926_Speleonectes_tulumensis_2 | l-xylulose reductase   | 169 | 8.88E-54 | 69.20% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding; C:cellular component  | 5 | IPR002198; IPR002347; IPR016040; PTHR24311 (PANTHER), PTHR24311:SF0 (PANTHER), SSF51735 (SUPERFAMILY)   |
| 1752 | DMPC15232937_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor   | 109 | 2.12E-08 | 60.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

|      |  |   |     |          |        |  |   |   |
|------|--|---|-----|----------|--------|--|---|---|
| 1753 | DMPC15233031_Speleonectes_tulumensis_2 | predicted protein                                   | 103 | 5.07E-07 | 61.50% | F:hydrolase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 1754 | DMPC15233076_Speleonectes_tulumensis_1 | beta actin  | 132 | 6.91E-23 | 93.90% | F:nucleotide binding   | 1 | IPR001916; IPR004000; IPR023346; G3DSA:1.10.530.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR11937:SF93 (PANTHER), SSF53067 (SUPERFAMILY) |
| 1755 | DMPC15233085_Speleonectes_tulumensis_0 | hypothetical protein BRAFLDRAFT_77844               | 239 | 3.26E-35 | 51.40% | F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity   | 4 | IPR013781   |
| 1756 | DMPC15233111_Speleonectes_tulumensis_0 | sphingomyelin phosphodiesterase                     | 262 | 1.64E-75 | 68.20% | F:sphingomyelin phosphodiesterase activity; F:hydrolase activity; P:sphingomyelin catabolic process                                | 3 | IPR004843; G3DSA:3.60.21.10 (GENE3D), PTHR10340 (PANTHER), PTHR10340:SF13 (PANTHER), SSF56300 (SUPERFAMILY)                               |
| 1757 | DMPC15233182_Speleonectes_tulumensis_0 | er degradation-enhancing alpha-mannosidase-like 1   | 148 | 1.13E-25 | 86.50% | C:cell; P:metabolic process; F:hydrolase activity; F:calcium ion binding   | 4 | IPR001382; PTHR11742:SF11 (PANTHER)   |
| 1758 | DMPC15233192_Speleonectes_tulumensis_2 | zinc finger protein 271-like                        | 140 | 7.07E-47 | 68.30% | -  | 0 | IPR007087; IPR013087; IPR015880; PTHR24402 (PANTHER), PTHR24402:SF42 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                    |
| 1759 | DMPC15233202_Speleonectes_tulumensis_2 | grn protein   | 165 | 6.65E-11 | 49.00% | C:mitochondrion; P:embryo implantation; P:blastocyst hatching; P:positive regulation of epithelial cell proliferation              | 4 | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER)   |
| 1760 | DMPC15233258_Speleonectes_tulumensis_1 | cathepsin 12  | 140 | 1.86E-29 | 82.10% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                            |
| 1761 | DMPC15233334_Speleonectes_tulumensis_0 | thioredoxin-like protein 1-like                     | 127 | 5.59E-42 | 88.10% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process | 5 | IPR005746; IPR012336; IPR013766; IPR017937; PTHR10438:SF19 (PANTHER)  |
| 1762 | DMPC15233422_Speleonectes_tulumensis_1 | ferritin h subunit                                  | 115 | 1.79E-19 | 89.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                                      | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1763 | DMPC15233477_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate dehydrogenase            | 138 | 1.36E-12 | 84.90% | F:catalytic activity; P:metabolic process  | 2 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)  |
| 1764 | DMPC15233480_Speleonectes_tulumensis_2 | cathepsin partial                                   | 134 | 2.26E-47 | 69.80% | F:hydrolase activity   | 1 | IPR000169; IPR000668; IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                  |
| 1765 | DMPC15233504_Speleonectes_tulumensis_2 | canopy homolog 2 precursor                          | 258 | 7.22E-42 | 71.80% | -  | 0 | IPR021852; PTHR13341 (PANTHER), PTHR13341:SF3 (PANTHER), tmhmm (TMHMM)  |
| 1766 | DMPC15233564_Speleonectes_tulumensis_0 | plasminogen activator spa                           | 123 | 1.05E-21 | 63.80% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP)                  |
| 1767 | DMPC15233600_Speleonectes_tulumensis_2 | acyl- -binding protein                              | 152 | 6.55E-40 | 81.20% | F:lipid binding  | 1 | IPR000582; IPR014352; IPR022408; PTHR23310 (PANTHER)  |
| 1768 | DMPC15233659_Speleonectes_tulumensis_0 | pr domain zinc finger protein 16-like               | 103 | 1.76E-16 | 67.00% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 1769 | DMPC15233727_Speleonectes_tulumensis_0 | soma ferritin                                       | 115 | 4.57E-24 | 88.30% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                                      | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1770 | DMPC15233826_Speleonectes_tulumensis_2 | hyaluronidase ph-20-like                            | 81  | 4.58E-10 | 55.30% | -  | 0 | IPR013785; IPR017853; IPR018155; PTHR11769:SF8 (PANTHER)  |
| 1771 | DMPC15233890_Speleonectes_tulumensis_1 | lysozyme c-like                                     | 102 | 7.77E-07 | 63.00% | -  | 0 | IPR001916; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER), PTHR11407:SF2 (PANTHER)  |
| 1772 | DMPC15233917_Speleonectes_tulumensis_1 | a chain carbonic anhydrase ii complexed with 4- -n- | 337 | 4.03E-37 | 59.20% | P:biological_process; F:binding; C:cytoplasm; C:cell   | 4 | IPR001148; IPR018338; IPR023561; SignalP-NN(euk) (SIGNALP)  |
| 1773 | DMPC15233952_Speleonectes_tulumensis_1 | calreticulin  | 69  | 2.80E-08 | 76.00% | -  | 0 | IPR001580; IPR013320; PTHR11073:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

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|------|--|---|-----|----------|--------|---|---|--|
| 1774 | DMPC15233955_Speleonectes tulumensis_2 | dermatopontin 3   | 103 | 4.06E-08 | 59.13% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1775 | DMPC15233957_Speleonectes tulumensis_0 | serine protease   | 181 | 3.91E-15 | 61.30% | F:peptidase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1776 | DMPC15233990_Speleonectes tulumensis_0 | peptidoglycan recognition protein 3 short class                                       | 324 | 6.05E-56 | 63.40% | F:zinc ion binding; P:peptidoglycan catabolic process; F:N-acetylmuramoyl-L-alanine amidase activity  | 3 | IPR002502; IPR006619; IPR015510; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1777 | DMPC15234069_Speleonectes tulumensis_2 | peptidase s1 and s6 chymotrypsin hap  | 144 | 8.24E-11 | 66.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                           |
| 1778 | DMPC15234204_Speleonectes tulumensis_0 | peptidyl-prolyl cis-trans   | 300 | 2.29E-57 | 70.70% | P:protein metabolic process; F:binding; F:catalytic activity  | 3 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF22 (PANTHER)   |
| 1779 | DMPC15234258_Speleonectes tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor                                       | 147 | 8.97E-20 | 51.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; PTHR12036 (PANTHER), PTHR12036:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                    |
| 1780 | DMPC15234310_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor  | 144 | 5.47E-21 | 65.60% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1781 | DMPC15234337_Speleonectes tulumensis_2 | epididymal secretory protein e1   | 145 | 1.74E-12 | 57.60% | P:transport   | 1 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1782 | DMPC15234450_Speleonectes tulumensis_2 | 60s ribosomal protein l40   | 125 | 8.55E-47 | 96.10% | C:ribosome; F:structural molecule activity; P:translation   | 3 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                   |
| 1783 | DMPC15234487_Speleonectes tulumensis_1 | ---NA---  | 92  |          |        | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                       |
| 1784 | DMPC15234511_Speleonectes tulumensis_1 | calponin transgelin   | 153 | 1.13E-54 | 91.40% | F:actin binding; P:cytoskeleton organization  | 2 | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER), PTHR18959:SF3 (PANTHER), SignalP-NN(euk) (SIGNALP)                             |
| 1785 | DMPC15234517_Speleonectes tulumensis_2 | low affinity immunoglobulin epsilon fc receptor                                       | 197 | 3.51E-17 | 50.10% | F:carbohydrate binding  | 1 | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER)  |
| 1786 | DMPC15234535_Speleonectes tulumensis_2 | matrix metalloproteinase-9  | 104 | 8.41E-09 | 54.00% | -   | 0 | IPR000562; IPR013806; PTHR22918 (PANTHER), PTHR22918:SF0 (PANTHER)   |
| 1787 | DMPC15234597_Speleonectes tulumensis_1 | selenium-dependent glutathione peroxidase   | 129 | 1.82E-44 | 78.60% | -   | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 1788 | DMPC15234647_Speleonectes tulumensis_2 | cathepsin l   | 158 | 1.94E-75 | 79.70% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)             |
| 1789 | DMPC15234692_Speleonectes tulumensis_1 | chain crystal structure of engineered northeast structural genomics consortium target | 159 | 6.29E-32 | 67.00% | F:catalytic activity  | 1 | IPR002110; IPR020683; PTHR24188 (PANTHER), PF13637 (PFAM)  |
| 1790 | DMPC15234696_Speleonectes tulumensis_2 | zinc finger protein 251-like  | 118 | 1.66E-12 | 64.90% | -   | 0 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                |
| 1791 | DMPC15234706_Speleonectes tulumensis_1 | cathepsin l   | 109 | 3.38E-17 | 78.30% | -   | 0 | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                                   |
| 1792 | DMPC15234712_Speleonectes tulumensis_1 | ---NA---  | 177 |          |        | -   | 0 | IPR008197; PTHR19441 (PANTHER)   |
| 1793 | DMPC15234752_Speleonectes tulumensis_2 | cathepsin l-like  | 150 | 1.51E-22 | 87.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)        |
| 1794 | DMPC15234810_Speleonectes tulumensis_1 | beta-ig-h3 fasciclin  | 87  | 1.06E-12 | 56.20% | -   | 0 | IPR000782; PTHR10900 (PANTHER)   |

|      |  |  |     |           |        |  |   |   |
|------|--|--|-----|-----------|--------|--|---|---|
| 1795 | DMPC15234852_Speleonectes_tulumensis_1 | chitinase partial                                      | 178 | 4.07E-36  | 60.10% | P:chitin catabolic process; F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process; F:cation binding; F:catalytic activity; F:chitinase activity | 6 | IPR001223; IPR011583; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)                                    |
| 1796 | DMPC15234877_Speleonectes_tulumensis_1 | serine protease like protein                           | 153 | 4.64E-15  | 60.40% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER)  |
| 1797 | DMPC15234887_Speleonectes_tulumensis_1 | dermatopontin 2  | 138 | 2.34E-17  | 58.90% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1798 | DMPC15234903_Speleonectes_tulumensis_1 | ---NA---   | 211 |           |        | -  | 0 | IPR002172; IPR023415; PTHR24652 (PANTHER), PTHR24652:SF0 (PANTHER)  |
| 1799 | DMPC15234913_Speleonectes_tulumensis_1 | serine protease 52-like                                | 126 | 8.44E-19  | 63.30% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)               |
| 1800 | DMPC15234944_Speleonectes_tulumensis_2 | female neotenic-specific protein 3                     | 137 | 4.22E-10  | 54.14% | -  | 0 | tmhmm (TMHMM)   |
| 1801 | DMPC15235027_Speleonectes_tulumensis_1 | serine protease inhibitor kazal-type 6-like            | 285 | 3.24E-09  | 63.75% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1802 | DMPC15235164_Speleonectes_tulumensis_2 | phosphoglucose isomerase                               | 244 | 1.13E-68  | 78.40% | -  | 0 | IPR001672; IPR023096; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER), SSF53697 (SUPERFAMILY)   |
| 1803 | DMPC15235190_Speleonectes_tulumensis_0 | abhydrolase domain-containing protein 13-like          | 207 | 1.12E-77  | 75.10% | -  | 0 | G3DSA:3.40.50.1820 (GENE3D), PTHR12277 (PANTHER), PF12695 (PFAM), SSF53474 (SUPERFAMILY)  |
| 1804 | DMPC15235221_Speleonectes_tulumensis_0 | trypsin 3  | 161 | 7.19E-56  | 76.80% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 1805 | DMPC15235315_Speleonectes_tulumensis_2 | macrophage migration inhibitory factor                 | 228 | 1.92E-39  | 68.40% | -  | 0 | IPR001398; IPR014347; G3DSA:3.30.429.10 (GENE3D), PTHR11954:SF4 (PANTHER)   |
| 1806 | DMPC15235331_Speleonectes_tulumensis_2 | protein flightless-1                                   | 96  | 1.81E-32  | 89.00% | F:actin binding  | 1 | IPR007122; PTHR11977:SF6 (PANTHER), SSF55753 (SUPERFAMILY)  |
| 1807 | DMPC15235336_Speleonectes_tulumensis_1 | trypsinogen 1  | 140 | 3.52E-30  | 71.60% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1808 | DMPC15235342_Speleonectes_tulumensis_2 | ferritin-1 heavy chain                                 | 114 | 5.85E-21  | 88.90% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1809 | DMPC15235346_Speleonectes_tulumensis_2 | glutamate carboxypeptidase                             | 142 | 1.44E-12  | 74.50% | C:cytoplasm; F:peptidase activity  | 2 | no IPS match  |
| 1810 | DMPC15235532_Speleonectes_tulumensis_2 | heat shock cognate 70 protein                          | 101 | 3.60E-42  | 95.10% | -  | 0 | IPR013126; G3DSA:3.90.640.10 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF53067 (SUPERFAMILY)   |
| 1811 | DMPC15235609_Speleonectes_tulumensis_0 | hyaluronan-binding protein 2                           | 96  | 7.00E-11  | 55.70% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1812 | DMPC15235619_Speleonectes_tulumensis_2 | myosin light chain smooth muscle                       | 121 | 5.54E-30  | 68.10% | -  | 0 | IPR003599; IPR007110; IPR013098; IPR013783; PTHR25963 (PANTHER), SSF48726 (SUPERFAMILY)   |
| 1813 | DMPC15235621_Speleonectes_tulumensis_1 | phosphoglycerate kinase 2                              | 148 | 2.67E-31  | 88.50% | P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; P:metabolic process; F:kinase activity                                    | 5 | IPR001576; IPR015901; PTHR11406:SF1 (PANTHER)   |
| 1814 | DMPC15235626_Speleonectes_tulumensis_2 | n-acetylglucosamine-1-phosphotransferase subunit gamma | 88  | 7.96E-22  | 69.60% | F:transferase activity; C:Golgi apparatus; C:extracellular region  | 3 | PTHR12630 (PANTHER), PTHR12630:SF2 (PANTHER)  |
| 1815 | DMPC15235685_Speleonectes_tulumensis_0 | protein lethal giant larvae-like isoform 1             | 294 | 4.94E-82  | 75.10% | -  | 0 | PTHR10241 (PANTHER), PTHR10241:SF10 (PANTHER)   |
| 1816 | DMPC15235800_Speleonectes_tulumensis_0 | perlucin 5   | 155 | 2.20E-12  | 48.70% | F:carbohydrate binding   | 1 | IPR001304; IPR016186; IPR016187; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1817 | DMPC15235840_Speleonectes_tulumensis_0 | carboxypeptidase b-like                                | 369 | 6.89E-118 | 65.30% | -  | 0 | IPR000834; IPR003146; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)   |

|      |  |  |     |           |        |   |   |   |
|------|--|--|-----|-----------|--------|---|---|---|
| 1818 | DMPC15235857_Speleonectes tulumensis 2 | isoform e                                  | 152 | 1.81E-18  | 50.70% | -   | 0 | <a href="#">IPR004911</a> ; <a href="#">PTHR13234:SF7 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 1819 | DMPC15235904_Speleonectes tulumensis 2 | soma ferritin                              | 116 | 2.17E-36  | 89.00% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                           | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 1820 | DMPC15236058_Speleonectes tulumensis 1 | trypsin                                    | 156 | 1.81E-28  | 63.50% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24276 (PANTHER)</a>   |
| 1821 | DMPC15236072_Speleonectes tulumensis 1 | soma ferritin                              | 114 | 1.36E-34  | 87.50% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                           | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 1822 | DMPC15236124_Speleonectes tulumensis 0 | grn protein                                | 97  | 9.99E-09  | 62.00% | -   | 0 | <a href="#">IPR000118</a> ; <a href="#">PTHR12274 (PANTHER)</a> , <a href="#">PTHR12274:SF0 (PANTHER)</a>   |
| 1823 | DMPC15236158_Speleonectes tulumensis 2 | protein mother of ft and tf 1-like         | 172 | 1.64E-16  | 55.00% | P:response to abscisic acid stimulus; P:positive regulation of seed germination; C:nucleus                              | 3 | <a href="#">IPR001858</a> ; <a href="#">IPR008914</a> ; <a href="#">PTHR11362 (PANTHER)</a> , <a href="#">PTHR11362:SF2 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 1824 | DMPC15236167_Speleonectes tulumensis 1 | kallikrein-11 isoform 2                    | 175 | 9.87E-21  | 64.80% | -   | 0 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24275 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 1825 | DMPC15236225_Speleonectes tulumensis 1 | histone partial                            | 126 | 2.07E-32  | 95.70% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4 | <a href="#">IPR002119</a> ; <a href="#">IPR007125</a> ; <a href="#">IPR009072</a> ; <a href="#">PTHR23430 (PANTHER)</a>   |
| 1826 | DMPC15236246_Speleonectes tulumensis 0 | hemagglutinin amebocyte aggregation factor | 140 | 2.98E-08  | 56.83% | -   | 0 | <a href="#">IPR026645</a>   |
| 1827 | DMPC15236505_Speleonectes tulumensis 1 | ---NA---                                   | 111 |           |        | -   | 0 | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a>   |
| 1828 | DMPC15236515_Speleonectes tulumensis 2 | epididymal secretory protein e1 precursor  | 200 | 2.60E-30  | 57.40% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding        | 6 | <a href="#">IPR003172</a> ; <a href="#">IPR014756</a> ; <a href="#">PTHR11306 (PANTHER)</a>   |
| 1829 | DMPC15236524_Speleonectes tulumensis 1 | hemocyanin subunit type 1 precursor        | 138 | 5.34E-49  | 69.50% | -   | 0 | <a href="#">IPR005204</a> ; <a href="#">IPR013788</a> ; <a href="#">PTHR11511:SF23 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>  |
| 1830 | DMPC15236584_Speleonectes tulumensis 1 | female neotenic-specific protein 3         | 152 | 9.68E-12  | 53.78% | -   | 0 | no IPS match  |
| 1831 | DMPC15236605_Speleonectes tulumensis 2 | SP14D1                                     | 160 | 7.74E-07  | 65.00% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24256 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 1832 | DMPC15236713_Speleonectes tulumensis 0 | tsa family                                 | 166 | 1.35E-37  | 71.30% | F:catalytic activity; F:antioxidant activity  | 2 | <a href="#">IPR000866</a> ; <a href="#">IPR012336</a> ; <a href="#">PTHR10681 (PANTHER)</a>   |
| 1833 | DMPC15236737_Speleonectes tulumensis 2 | ferritin gfl                               | 111 | 8.78E-32  | 89.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                           | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 1834 | DMPC15236912_Speleonectes tulumensis 1 | ferritin-1 heavy chain                     | 107 | 1.23E-18  | 92.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                           | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 1835 | DMPC15236991_Speleonectes tulumensis 1 | zinc carboxypeptidase a 1-like             | 145 | 3.73E-11  | 52.25% | -   | 0 | <a href="#">IPR003146</a> ; <a href="#">IPR009020</a> ; <a href="#">PTHR11705 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 1836 | DMPC15237028_Speleonectes tulumensis 0 | carboxypeptidase b-like                    | 178 | 8.65E-64  | 71.50% | -   | 0 | <a href="#">IPR000834</a> ; <a href="#">G3DSA:3.40.630.10 (GENE3D)</a> , <a href="#">PTHR11705 (PANTHER)</a> , <a href="#">SSF53187 (SUPERFAMILY)</a>   |
| 1837 | DMPC15237041_Speleonectes tulumensis 0 | ferritin 3-like protein                    | 125 | 1.98E-26  | 75.00% | F:binding   | 1 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 1838 | DMPC15237064_Speleonectes tulumensis 2 | u8-agatoxin-ao1a-like isoform 2            | 149 | 5.33E-33  | 75.60% | P:hormone-mediated signaling pathway; C:extracellular region  | 2 | <a href="#">IPR004169</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF57059 (SUPERFAMILY)</a>  |
| 1839 | DMPC15237147_Speleonectes tulumensis 2 | catalase                                   | 316 | 1.05E-105 | 82.30% | P:response to stress; P:catabolic process; F:binding; F:antioxidant activity; F:catalytic activity; P:metabolic process | 6 | <a href="#">IPR002226</a> ; <a href="#">IPR010582</a> ; <a href="#">IPR011614</a> ; <a href="#">IPR018028</a> ; <a href="#">IPR020835</a> ; <a href="#">PTHR11465:SF0 (PANTHER)</a>   |
| 1840 | DMPC15237189_Speleonectes tulumensis 1 | heat shock 70 kda protein 14               | 132 | 2.39E-44  | 73.80% | -   | 0 | <a href="#">IPR013126</a> ; <a href="#">IPR018181</a> ; <a href="#">G3DSA:3.30.420.40 (GENE3D)</a> , <a href="#">G3DSA:3.90.640.10 (GENE3D)</a> , <a href="#">PTHR19375 (PANTHER)</a> , <a href="#">PTHR19375:SF81 (PANTHER)</a> , <a href="#">SSF53067 (SUPERFAMILY)</a> |
| 1841 | DMPC15237229_Speleonectes tulumensis 1 | testicular serine protease 3               | 129 | 1.91E-10  | 63.10% | F:peptidase activity  | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24259 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>   |

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|------|--|---|-----|----------|--------|--|---|--|
| 1842 | DMPC15237478_Speleonectes_tulumensis_2 | arylsulfatase b                                 | 232 | 3.50E-54 | 59.70% | P:metabolic process; F:catalytic activity; F:sulfuric ester hydrolase activity                                   | 3 | IPR000917; IPR017849; IPR017850; G3DSA:3.30.1120.10 (GENE3D), PTHR10342 (PANTHER), PTHR10342:SF19 (PANTHER)                                  |
| 1843 | DMPC15237631_Speleonectes_tulumensis_0 | soma ferritin                                   | 107 | 1.92E-28 | 89.20% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process                    | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1844 | DMPC15237690_Speleonectes_tulumensis_1 | hemocyanin subunit type 2 precursor             | 95  | 4.47E-31 | 71.60% | -  | 0 | IPR005203; IPR013788; IPR014756  |
| 1845 | DMPC15237709_Speleonectes_tulumensis_1 | lysosomal pro-x carboxypeptidase-like           | 151 | 1.52E-54 | 75.80% | F:peptidase activity   | 1 | IPR008758; PTHR11010:SF9 (PANTHER)   |
| 1846 | DMPC15237717_Speleonectes_tulumensis_2 | glucan pattern-recognition lipoprotein          | 650 | 2.39E-17 | 46.67% | -  | 0 | no IPS match   |
| 1847 | DMPC15237750_Speleonectes_tulumensis_0 | oocyte protease inhibitor-1 precursor           | 88  | 2.66E-08 | 65.50% | P:proteolysis; F:peptidase activity  | 2 | IPR000716; PTHR12036 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1848 | DMPC15237793_Speleonectes_tulumensis_2 | fk506-binding protein 2                         | 119 | 4.94E-33 | 78.50% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity                       | 3 | IPR001179; IPR023566; G3DSA:3.10.50.40 (GENE3D), PTHR10516:SF134 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54534 (SUPERFAMILY) |
| 1849 | DMPC15237825_Speleonectes_tulumensis_2 | 39s ribosomal protein mitochondrial-like        | 307 | 2.26E-61 | 62.80% | C:ribosome   | 1 | IPR008914; PTHR11362 (PANTHER), PTHR11362:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 1850 | DMPC15237902_Speleonectes_tulumensis_1 | serine protease mitochondrial                   | 208 | 1.43E-14 | 68.80% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR22939 (PANTHER), PTHR22939:SF12 (PANTHER), SignalP-NN(euk) (SIGNALP)                               |
| 1851 | DMPC15238013_Speleonectes_tulumensis_2 | mitochondrial manganese superoxide dismutase    | 199 | 5.59E-65 | 84.00% | P:biological_process; F:binding; P:metabolic process; F:catalytic activity                                       | 4 | IPR001189; IPR019831; IPR019832; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)  |
| 1852 | DMPC15238015_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor             | 141 | 8.09E-76 | 76.00% | -  | 0 | IPR005203; IPR013788; IPR014756  |
| 1853 | DMPC15238109_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor      | 145 | 1.52E-13 | 59.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1854 | DMPC15238147_Speleonectes_tulumensis_2 | peroxiredoxin-4                                 | 138 | 6.88E-40 | 97.00% | P:metabolic process; F:antioxidant activity; F:catalytic activity  | 3 | IPR012336; IPR019479; G3DSA:3.30.1020.10 (GENE3D), PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER), SignalP-NN(euk) (SIGNALP)                  |
| 1855 | DMPC15238173_Speleonectes_tulumensis_1 | trypsin 3                                       | 131 | 2.12E-47 | 78.80% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1856 | DMPC15238222_Speleonectes_tulumensis_0 | ---NA---  | 203 |          |        | -  | 0 | IPR007947; PTHR11337 (PANTHER), tmhmm (TMHMM)  |
| 1857 | DMPC15238268_Speleonectes_tulumensis_0 | carbonic anhydrase 1                            | 338 | 3.27E-34 | 67.10% | F:zinc ion binding; P:one-carbon metabolic process; F:carbonate dehydratase activity; F:metal ion binding        | 4 | IPR001148; IPR018436; IPR023561  |
| 1858 | DMPC15238313_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 119 | 7.77E-15 | 54.20% | P:metabolic process  | 1 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1859 | DMPC15238328_Speleonectes_tulumensis_1 | ---NA---  | 81  |          |        | -  | 0 | IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1860 | DMPC15238345_Speleonectes_tulumensis_2 | epididymal secretory protein e1 isoform 1       | 142 | 1.47E-21 | 59.10% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding | 6 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1861 | DMPC15238407_Speleonectes_tulumensis_2 | pacifastin light chain                          | 166 | 1.79E-08 | 53.50% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity                                      | 2 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1862 | DMPC15238448_Speleonectes_tulumensis_0 | pacifastin light chain                          | 128 | 2.08E-08 | 53.33% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity                                      | 2 | IPR008037; IPR020862; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1863 | DMPC15238620_Speleonectes_tulumensis_1 | tpa_inf: fibrinogen-related protein 2           | 154 | 1.63E-24 | 68.70% | F:receptor binding; C:extracellular space; P:signal transduction   | 3 | IPR002181; IPR014715; IPR020837; PTHR19143 (PANTHER)   |

|      |  |  |     |          |        |  |   |  |
|------|--|--|-----|----------|--------|--|---|--|
| 1864 | DMPC15238625_Speleonectes_tulumensis_2 | diuretic hormone class 2-like  | 215 | 1.09E-21 | 86.40% | -  | 0 | no IPS match   |
| 1865 | DMPC15238735_Speleonectes_tulumensis_2 | pancreatic alpha-amylase-like isoform 1                                  | 79  | 1.08E-18 | 75.60% | F:hydrolase activity; P:metabolic process  | 2 | IPR013781; IPR015902; IPR017853; PTHR10357:SF26 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                      |
| 1866 | DMPC15238776_Speleonectes_tulumensis_1 | transmembrane protease serine 12-like                                    | 325 | 1.47E-07 | 75.00% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 1867 | DMPC15238829_Speleonectes_tulumensis_2 | phospholipase a2-like  | 154 | 5.24E-16 | 62.50% | F:phospholipase activity; P:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region   | 5 | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1868 | DMPC15238885_Speleonectes_tulumensis_4 | ---NA---   | 153 |          |        | -  | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1869 | DMPC15238894_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like                          | 104 | 4.03E-09 | 60.60% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1870 | DMPC15238907_Speleonectes_tulumensis_0 | anti-lipopolsaccharide factor isoform 7                                  | 143 | 1.04E-29 | 67.40% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1871 | DMPC15238912_Speleonectes_tulumensis_2 | ferritin 3-like protein  | 136 | 1.08E-25 | 79.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 1872 | DMPC15238974_Speleonectes_tulumensis_0 | von willebrand factor type egf and pentraxin domain-containing protein 1 | 438 | 1.44E-10 | 42.30% | -  | 0 | IPR000436; G3DSA:2.10.70.10 (GENE3D), PTHR19325 (PANTHER)  |
| 1873 | DMPC15239085_Speleonectes_tulumensis_1 | protein  | 158 | 4.09E-29 | 62.30% | -  | 0 | IPR026645  |
| 1874 | DMPC15239103_Speleonectes_tulumensis_2 | serine protease 52-like  | 124 | 8.09E-19 | 63.10% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1875 | DMPC15239163_Speleonectes_tulumensis_2 | mitochondrial manganese superoxide dismutase                             | 119 | 1.55E-27 | 87.50% | F:binding; P:metabolic process; F:catalytic activity   | 3 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 1876 | DMPC15239173_Speleonectes_tulumensis_2 | chymotrypsinogen b-like  | 181 | 7.64E-29 | 59.00% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)   |
| 1877 | DMPC15239272_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor-like                          | 145 | 2.39E-22 | 60.30% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1878 | DMPC15239285_Speleonectes_tulumensis_2 | si:dkey- protein   | 108 | 4.03E-10 | 59.70% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1879 | DMPC15239332_Speleonectes_tulumensis_0 | probable er retained protein   | 111 | 3.19E-27 | 73.40% | C:membrane   | 1 | IPR016093; IPR027005; G3DSA:2.80.10.50 (GENE3D), SignalP-NN(euk) (SIGNALP)   |
| 1880 | DMPC15239374_Speleonectes_tulumensis_0 | peroxiredoxin 1-like   | 118 | 2.79E-17 | 47.50% | P:oxidation-reduction process; F:oxidoreductase activity; F:antioxidant activity; F:peroxiredoxin activity   | 4 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)  |
| 1881 | DMPC15239390_Speleonectes_tulumensis_5 | glutathione peroxidase 1   | 152 | 1.16E-22 | 84.00% | -  | 0 | IPR000889; IPR012336; tmhmm (TMHMM)  |
| 1882 | DMPC15239533_Speleonectes_tulumensis_0 | cysteine protease  | 127 | 1.07E-09 | 66.80% | P:proteolysis; F:peptidase activity; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 6 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1883 | DMPC15239549_Speleonectes_tulumensis_2 | serine protease nudel  | 170 | 1.12E-19 | 51.50% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001190; IPR002172; IPR017448; IPR023415; PR00261 (PRINTS), G3DSA:3.10.250.10 (GENE3D), PTHR10529 (PANTHER), PTHR10529:SF113 (PANTHER) |
| 1884 | DMPC15239570_Speleonectes_tulumensis_1 | n-acetylgalactosamine-6-sulfatase- partial                               | 314 | 2.86E-61 | 71.20% | P:metabolic process; F:catalytic activity; F:sulfuric ester hydrolase activity; C:cellular component   | 4 | IPR017850; G3DSA:3.30.1120.10 (GENE3D), PTHR10342 (PANTHER), PTHR10342:SF27 (PANTHER), tmhmm (TMHMM)                                     |
| 1885 | DMPC15239699_Speleonectes_tulumensis_0 | ferritin-1 heavy chain   | 96  | 5.19E-22 | 91.80% | P:cellular homeostasis; F:binding; F:catalytic activity; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |

|      |  |  |     |           |        |  |    |  |
|------|--|--|-----|-----------|--------|--|----|--|
| 1886 | DMPC15239719_Speleonectes_tulumensis_0 | inactive hydroxysteroid dehydrogenase-like protein 1 | 225 | 6.93E-79  | 75.40% | P:metabolic process  | 1  | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24316 (PANTHER), PTHR24316:SF68 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 1887 | DMPC15239744_Speleonectes_tulumensis_2 | trypsin  | 143 | 8.65E-24  | 62.60% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)   |
| 1888 | DMPC15239797_Speleonectes_tulumensis_0 | serine carboxypeptidase family protein               | 109 | 1.55E-16  | 73.40% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR001563; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 1889 | DMPC15239899_Speleonectes_tulumensis_2 | kazal-type protease inhibitor                        | 133 | 3.22E-11  | 51.88% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 1890 | DMPC15239973_Speleonectes_tulumensis_2 | cytosolic non-specific dipeptidase                   | 203 | 7.57E-74  | 79.20% | P:metabolic process; F:peptidase activity  | 2  | IPR011650; PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER)   |
| 1891 | DMPC15239989_Speleonectes_tulumensis_1 | mitochondrial cardiolipin hydrolase-like             | 160 | 6.26E-47  | 72.20% | F:binding; P:metabolic process; C:cell; F:catalytic activity; C:mitochondrion  | 5  | IPR001736; IPR025202; G3DSA:3.30.870.10 (GENE3D), PTHR21248 (PANTHER), PTHR21248:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF56024 (SUPERFAMILY) |
| 1892 | DMPC15240030_Speleonectes_tulumensis_1 | kazal-type protease inhibitor                        | 118 | 2.82E-15  | 57.80% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 1893 | DMPC15240080_Speleonectes_tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase | 461 | 2.11E-37  | 54.40% | -  | 0  | IPR004911; tmhmm (TMHMM)   |
| 1894 | DMPC15240126_Speleonectes_tulumensis_0 | cathepsin c  | 167 | 2.10E-73  | 80.30% | C:lysosome; F:peptidase activity; F:protein binding; F:binding; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:biological_process; C:endoplasmic reticulum; C:Golgi apparatus | 11 | IPR000169; IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF17 (PANTHER), SSF54001 (SUPERFAMILY)   |
| 1895 | DMPC15240130_Speleonectes_tulumensis_1 | aminoacylase-1-like isoform 2                        | 167 | 8.49E-71  | 77.60% | C:cytoplasm; ; F:peptidase activity; P:protein metabolic process; P:catabolic process; F:hydrolase activity  | 6  | IPR001261; IPR002933; G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF8 (PANTHER), SSF53187 (SUPERFAMILY)   |
| 1896 | DMPC15240164_Speleonectes_tulumensis_1 | trypsin 3  | 120 | 2.79E-37  | 76.40% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1897 | DMPC15240270_Speleonectes_tulumensis_2 | trypsin partial                                      | 162 | 8.32E-10  | 70.60% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)               |
| 1898 | DMPC15240281_Speleonectes_tulumensis_1 | ---NA---   | 141 |           |        | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF30 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                         |
| 1899 | DMPC15240312_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor      | 125 | 3.44E-17  | 51.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1900 | DMPC15240368_Speleonectes_tulumensis_0 | long form-like                                       | 613 | 8.03E-167 | 86.90% | C:cytoskeleton; C:protein complex; F:motor activity  | 3  | IPR002928; PTHR13140 (PANTHER), PTHR13140:SF11 (PANTHER)   |
| 1901 | DMPC15240374_Speleonectes_tulumensis_1 | fibrinogen c domain-containing protein 1-a-like      | 257 | 2.00E-31  | 67.80% | F:receptor binding; C:extracellular space; P:signal transduction   | 3  | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER), tmhmm (TMHMM)   |
| 1902 | DMPC15240428_Speleonectes_tulumensis_0 | ovarian cysteine protease inhibitor                  | 89  | 1.89E-10  | 64.20% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1903 | DMPC15240473_Speleonectes_tulumensis_1 | trypsin 3  | 128 | 1.16E-22  | 58.00% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1904 | DMPC15240512_Speleonectes_tulumensis_1 | trypsinogen 2  | 126 | 8.20E-37  | 75.30% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1905 | DMPC15240522_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor                  | 123 | 1.67E-75  | 69.50% | -  | 0  | IPR005203; IPR013788; IPR014756  |



|      |  |  |     |          |        |  |    |  |
|------|--|--|-----|----------|--------|--|----|--|
| 1906 | DMPC15240533_Speleonectes_tulumensis_0 | zinc c2h2 type family protein  | 92  | 5.29E-16 | 66.40% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), PF13894 (PFAM), PF13912 (PFAM), SSF57667 (SUPERFAMILY)                                     |
| 1907 | DMPC15240583_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor   | 127 | 2.34E-18 | 59.20% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 1908 | DMPC15240589_Speleonectes_tulumensis_4 | down syndrome cell adhesion molecule-like protein cg42256-like   | 113 | 4.49E-24 | 64.80% | -  | 0  | IPR013098; IPR013783; PTHR10489 (PANTHER), SSF48726 (SUPERFAMILY)  |
| 1909 | DMPC15240880_Speleonectes_tulumensis_0 | oocyte protease inhibitor-1 precursor  | 75  | 2.99E-08 | 69.80% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12036 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1910 | DMPC15240973_Speleonectes_tulumensis_0 | anopheles stephensi ubiquitin  | 141 | 5.34E-64 | 98.90% | C:cytoskeleton; C:protein complex; F:structural molecule activity; C:lipid particle; P:cellular protein modification process; P:protein metabolic process; P:catabolic process; C:ribosome; C:cytosol; P:translation | 10 | IPR000626; IPR001975; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                    |
| 1911 | DMPC15240975_Speleonectes_tulumensis_1 | mantle protein 9   | 146 | 3.60E-08 | 67.67% | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1912 | DMPC15241030_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor precursor   | 251 | 1.43E-25 | 59.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1913 | DMPC15241107_Speleonectes_tulumensis_2 | cationic trypsin-3-like  | 143 | 3.91E-19 | 62.80% | P:proteolysis; F:serine-type peptidase activity; F:hydrolase activity; F:peptidase activity  | 4  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)   |
| 1914 | DMPC15241239_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7   | 145 | 2.04E-30 | 66.60% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1915 | DMPC15241250_Speleonectes_tulumensis_0 | thioredoxin 1  | 108 | 1.31E-20 | 74.50% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process   | 5  | IPR005746; IPR012336; IPR013766; SignalP-NN(euk) (SIGNALP)   |
| 1916 | DMPC15241319_Speleonectes_tulumensis_1 | isoform cra_b  | 130 | 4.24E-38 | 98.00% | -  | 0  | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)   |
| 1917 | DMPC15241391_Speleonectes_tulumensis_1 | trypsin 3  | 157 | 1.94E-36 | 73.30% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 1918 | DMPC15241401_Speleonectes_tulumensis_1 | insulin-degrading enzyme   | 127 | 1.65E-24 | 76.00% | F:binding; F:catalytic activity  | 2  | IPR011237; IPR011249; PTHR11851 (PANTHER), PTHR11851:SF64 (PANTHER)  |
| 1919 | DMPC15241410_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like  | 121 | 3.86E-13 | 58.40% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1920 | DMPC15241438_Speleonectes_tulumensis_2 | estradiol 17-beta-dehydrogenase 8  | 199 | 1.61E-57 | 69.80% | P:oxidation-reduction process; F:oxidoreductase activity; P:metabolic process; F:nucleotide binding  | 4  | IPR002198; IPR002347; IPR016040; IPR020842; IPR020904; PTHR24316 (PANTHER), PTHR24316:SF3 (PANTHER), SSF51735 (SUPERFAMILY)                                      |
| 1921 | DMPC15241557_Speleonectes_tulumensis_1 | zinc finger protein 271 (zinc finger protein 7) (zinc finger protein znfp133) (epstein-barr virus-induced zinc finger protein) (znf-eb) (ct-zfp48) (zinc finger protein) | 122 | 5.04E-16 | 63.80% | F:nucleic acid binding; F:zinc ion binding; C:intracellular  | 3  | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)   |
| 1922 | DMPC15241600_Speleonectes_tulumensis_2 | ame: full=saxiphilin short=sax flags: precursor  | 147 | 6.80E-22 | 52.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1923 | DMPC15241696_Speleonectes_tulumensis_1 | ---NA---   | 142 | -        | -      | -  | 0  | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |

|      |  |  |     |          |        |   |   |   |
|------|--|--|-----|----------|--------|---|---|---|
| 1924 | DMPC15241722_Speleonectes_tulumensis_0 | serine protease precursor  | 147 | 3.80E-16 | 58.80% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding                       | 4 | IPR007280; SignalP-NN(euk) (SIGNALP)  |
| 1925 | DMPC15241800_Speleonectes_tulumensis_1 | ecdysteroid-regulated protein  | 153 | 1.07E-25 | 58.70% | -   | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1926 | DMPC15241912_Speleonectes_tulumensis_0 | peptidyl-prolyl cis-trans isomerase h  | 123 | 2.27E-56 | 93.80% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity  | 3 | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF58 (PANTHER)                       |
| 1927 | DMPC15241977_Speleonectes_tulumensis_0 | serine protease  | 269 | 6.08E-23 | 55.80% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP)            |
| 1928 | DMPC15241998_Speleonectes_tulumensis_0 | tachykinin precursor   | 110 | 1.12E-09 | 64.33% | -   | 0 | SignalP-NN(euk) (SIGNALP)   |
| 1929 | DMPC15242008_Speleonectes_tulumensis_0 | atrial natriuretic peptide-converting enzyme   | 102 | 7.63E-35 | 81.30% | F:peptidase activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF63 (PANTHER)                        |
| 1930 | DMPC15242053_Speleonectes_tulumensis_1 | dermatopontin 3  | 97  | 6.79E-08 | 67.20% | -   | 0 | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1931 | DMPC15242154_Speleonectes_tulumensis_0 | a disintegrin and metalloproteinase with thrombospondin motifs 18-like                 | 126 | 5.21E-24 | 59.20% | F:hydrolase activity  | 1 | IPR001590; IPR024079; PTHR13723 (PANTHER), SSF55486 (SUPERFAMILY)   |
| 1932 | DMPC15242187_Speleonectes_tulumensis_0 | cationic trypsin-3-like  | 150 | 3.77E-34 | 63.00% | -   | 0 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)                                       |
| 1933 | DMPC15242339_Speleonectes_tulumensis_5 | cg41536 cg41536- partial   | 179 | 1.22E-10 | 75.30% | -   | 0 | no IPS match  |
| 1934 | DMPC15242436_Speleonectes_tulumensis_0 | ame: full=hemagglutinin ameocyte aggregation factor ame: full=18k-laf flags: precursor | 70  | 8.04E-10 | 65.30% | -   | 0 | no IPS match  |
| 1935 | DMPC15242520_Speleonectes_tulumensis_0 | hemocyanin subunit 1   | 155 | 2.43E-48 | 68.20% | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 1936 | DMPC15242549_Speleonectes_tulumensis_0 | dentin matrix protein 4-like   | 107 | 3.34E-53 | 85.20% | -   | 0 | IPR009581; IPR024869; PTHR12450:SF8 (PANTHER)   |
| 1937 | DMPC15242596_Speleonectes_tulumensis_1 | dnaj homolog subfamily c member 8-like   | 161 | 4.81E-69 | 89.40% | -   | 0 | IPR001623; PTHR15606 (PANTHER)  |
| 1938 | DMPC15242618_Speleonectes_tulumensis_1 | prolyl 3-hydroxylase 2-like  | 218 | 2.31E-51 | 70.90% | F:catalytic activity  | 1 | PTHR14049 (PANTHER)   |
| 1939 | DMPC15242622_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor  | 131 | 1.90E-20 | 53.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; PTHR12036 (PANTHER), PTHR12036:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                     |
| 1940 | DMPC15242690_Speleonectes_tulumensis_1 | chorion peroxidase   | 177 | 2.91E-47 | 61.60% | P:oxidation-reduction process; F:heme binding; F:oxidoreductase activity; P:response to oxidative stress; F:peroxidase activity                     | 5 | IPR002007; IPR010255; PTHR11475 (PANTHER)   |
| 1941 | DMPC15242780_Speleonectes_tulumensis_0 | trypsin  | 160 | 4.90E-26 | 55.20% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity   | 3 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP) |

|      |  |  |     |          |        |  |    |  |
|------|--|--|-----|----------|--------|--|----|--|
| 1942 | DMPC15242832_Speleonectes_tulumensis_0 | ubiquitin c  | 142 | 7.67E-82 | 99.00% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:cellular protein modification process; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:transport | 27 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)       |
| 1943 | DMPC15242904_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor isoform 7             | 144 | 4.19E-30 | 68.30% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 1944 | DMPC15242923_Speleonectes_tulumensis_1 | chitinase 2  | 168 | 9.69E-26 | 67.30% | P:carbohydrate metabolic process; F:hydrolase activity   | 2  | IPR001223; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 1945 | DMPC15242938_Speleonectes_tulumensis_2 | ankyrin repeat domain-containing protein 49-like     | 199 | 6.63E-30 | 66.90% | -  | 0  | IPR002110; IPR020683; PTHR24193 (PANTHER)  |
| 1946 | DMPC15242961_Speleonectes_tulumensis_2 | ---NA---   | 97  |          |        | -  | 0  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                  |
| 1947 | DMPC15243063_Speleonectes_tulumensis_0 | gamma-interferon-inducible lysosomal thiol reductase | 164 | 5.95E-39 | 58.30% | -  | 0  | IPR004911; SignalP-NN(euk) (SIGNALP)   |
| 1948 | DMPC15243072_Speleonectes_tulumensis_1 | ---NA---   | 136 |          |        | -  | 0  | IPR003172; PTHR11306 (PANTHER)   |
| 1949 | DMPC15243078_Speleonectes_tulumensis_4 | vitellogenin 2                                       | 139 | 1.89E-12 | 47.80% | P:lipid transport; F:lipid transporter activity  | 2  | IPR015255; IPR015819   |
| 1950 | DMPC15243110_Speleonectes_tulumensis_2 | 15-hydroxyprostaglandin dehydrogenase                | 170 | 4.27E-30 | 64.50% | P:lipid metabolic process; F:receptor activity; C:nucleolus; F:catalytic activity; P:reproduction; F:nucleotide binding; P:signal transduction; F:protein binding; P:regulation of biological process; P:cell cycle; C:cytoplasm   | 11 | IPR002198; IPR002347; IPR016040; PTHR24310 (PANTHER), PTHR24310:SF0 (PANTHER), SSF51735 (SUPERFAMILY)                    |
| 1951 | DMPC15243161_Speleonectes_tulumensis_2 | dnaj homolog subfamily c member 4-like               | 107 | 4.55E-16 | 70.10% | F:protein binding  | 1  | IPR001623; PTHR24078 (PANTHER), PTHR24078:SF22 (PANTHER)   |
| 1952 | DMPC15243169_Speleonectes_tulumensis_0 | dehydrogenase reductase sdr family member 11-like    | 164 | 1.27E-45 | 75.40% | P:metabolic process  | 1  | IPR002198; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)                               |
| 1953 | DMPC15243180_Speleonectes_tulumensis_2 | dnaj homolog subfamily b member 6-like               | 329 | 4.72E-62 | 63.80% | F:unfolded protein binding; P:protein folding; F:heat shock protein binding  | 3  | IPR001623; IPR018253; PTHR24077 (PANTHER), PTHR24077:SF24 (PANTHER)  |
| 1954 | DMPC15243195_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor           | 141 | 1.63E-13 | 56.30% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1955 | DMPC15243206_Speleonectes_tulumensis_2 | iron zinc purple acid phosphatase-like               | 138 | 2.41E-31 | 67.40% | F:metal ion binding; F:hydrolase activity; F:acid phosphatase activity   | 3  | IPR003961; IPR008963; IPR015914; PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1956 | DMPC15243251_Speleonectes_tulumensis_0 | epidermal retinol dehydrogenase 2                    | 295 | 5.58E-94 | 75.60% | P:metabolic process  | 1  | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SSF51735 (SUPERFAMILY)                    |
| 1957 | DMPC15243308_Speleonectes_tulumensis_1 | trypsinogen 2  | 125 | 2.31E-32 | 67.90% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)               |
| 1958 | DMPC15243343_Speleonectes_tulumensis_0 | carboxypeptidase b-like                              | 139 | 2.69E-13 | 76.10% | -  | 0  | G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SSF53187 (SUPERFAMILY)  |

|      |  |  |     |          |        |   |              |   |
|------|--|--|-----|----------|--------|---|--------------|---|
| 1959 | DMPC15243390_Speleonectes tulumensis 2 | ---NA---   | 129 | -        |        | 0   | no IPS match |   |
| 1960 | DMPC15243394_Speleonectes tulumensis 2 | calreticulin   | 296 | 1.10E-22 | 80.10% | -   | 0            | IPR001580; IPR008985; PTHR11073:SF2 (PANTHER), tmhmm (TMHMM)  |
| 1961 | DMPC15243474_Speleonectes tulumensis 2 | ves g 5 allergen                                     | 158 | 1.57E-19 | 57.10% | C:extracellular region  | 1            | IPR001283; IPR002413; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1962 | DMPC15243508_Speleonectes tulumensis 1 | hemagglutinin amebocyte aggregation factor           | 139 | 4.51E-14 | 61.80% | -   | 0            | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1963 | DMPC15243631_Speleonectes tulumensis 0 | orcokinin precursor                                  | 348 | 2.81E-21 | 71.50% | -   | 0            | PTHR22283 (PANTHER), tmhmm (TMHMM)  |
| 1964 | DMPC15243653_Speleonectes tulumensis 1 | c1q and tumor necrosis factor-related protein 2      | 304 | 2.39E-09 | 46.80% | -   | 0            | IPR001073; IPR008983; PTHR22923 (PANTHER), PTHR22923:SF1 (PANTHER), tmhmm (TMHMM)   |
| 1965 | DMPC15243674_Speleonectes tulumensis 0 | glucose dehydrogenase                                | 115 | 4.28E-15 | 85.70% | F:metabolic process; F:nucleotide binding; P:reproduction; P:carbohydrate metabolic process; P:multicellular organismal development; F:catalytic activity; C:extracellular region | 7            | IPR000172; G3DSA:3.50.50.60 (GENE3D), PTHR11552 (PANTHER), PTHR11552:SF10 (PANTHER), tmhmm (TMHMM), SSF51905 (SUPERFAMILY)        |
| 1966 | DMPC15243697_Speleonectes tulumensis 2 | hemagglutinin amebocyte aggregation factor           | 155 | 2.89E-22 | 62.40% | -   | 0            | IPR026645   |
| 1967 | DMPC15243737_Speleonectes tulumensis 1 | ---NA---   | 87  |          |        | -   | 0            | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1968 | DMPC15243747_Speleonectes tulumensis 1 | granulin   | 163 | 9.09E-16 | 54.90% | -   | 0            | IPR000118; PTHR12274 (PANTHER), PTHR12274:SF0 (PANTHER)   |
| 1969 | DMPC15243755_Speleonectes tulumensis 2 | inactive hydroxysteroid dehydrogenase-like protein 1 | 210 | 8.82E-70 | 71.40% | -   | 0            | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF68 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY) |
| 1970 | DMPC15243805_Speleonectes tulumensis 2 | cathepsin 1  | 138 | 1.18E-64 | 79.60% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3            | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)          |
| 1971 | DMPC15243810_Speleonectes tulumensis 1 | heavy polypeptide 1                                  | 106 | 1.30E-20 | 90.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5            | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 1972 | DMPC15243830_Speleonectes tulumensis 2 | equistatin precursor                                 | 116 | 8.01E-11 | 60.60% | P:proteolysis; F:peptidase activity   | 2            | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP)   |
| 1973 | DMPC15243868_Speleonectes tulumensis 0 | epoxide hydrolase                                    | 122 | 8.05E-28 | 83.10% | P:metabolic process; F:hydrolase activity   | 2            | G3DSA:3.40.50.1820 (GENE3D), PTHR10992 (PANTHER), PTHR10992:SF98 (PANTHER), PF12697 (PFAM), SSF53474 (SUPERFAMILY)                |
| 1974 | DMPC15243921_Speleonectes tulumensis 2 | serine protease                                      | 143 | 1.83E-30 | 66.10% | -   | 0            | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 1975 | DMPC15243928_Speleonectes tulumensis 1 | proclotting enzyme-like                              | 216 | 7.80E-17 | 61.30% | F:hydrolase activity  | 1            | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER)   |
| 1976 | DMPC15243995_Speleonectes tulumensis 0 | mhc class ii-associated invariant chain              | 93  | 9.15E-08 | 64.67% | P:multicellular organismal development  | 1            | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 1977 | DMPC15244002_Speleonectes tulumensis 0 | sans isoform a                                       | 189 | 2.34E-62 | 80.20% | C:endosome  | 1            | IPR002110; IPR020683; PTHR24161 (PANTHER), PTHR24161:SF6 (PANTHER)  |
| 1978 | DMPC15244014_Speleonectes tulumensis 2 | carbonyl isoform b                                   | 115 | 2.98E-22 | 62.40% | F:catalytic activity  | 1            | IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF44 (PANTHER), SSF51735 (SUPERFAMILY)                                       |
| 1979 | DMPC15244039_Speleonectes tulumensis 1 | chorion peroxidase-like                              | 385 | 5.46E-69 | 70.10% | -   | 0            | IPR002007; IPR010255; PTHR11475 (PANTHER)   |
| 1980 | DMPC15244094_Speleonectes tulumensis 2 | thioredoxin peroxidase                               | 121 | 1.87E-23 | 84.00% | -   | 0            | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF50 (PANTHER)   |
| 1981 | DMPC15244154_Speleonectes tulumensis 0 | 14.03.03   | 78  | 4.39E-12 | 82.60% | F:protein binding   | 1            | IPR000308; IPR023410; PTHR18860:SF0 (PANTHER)   |

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|------|--|--|-----|-----------|--------|--|---|--|
| 1982 | DMPC15244274_Speleonectes_tulumensis_2 | epididymal secretory protein e1                                | 114 | 6.54E-12  | 65.00% | P:transport; F:binding; C:intracellular  | 3 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1983 | DMPC15244339_Speleonectes_tulumensis_1 | mitochondrial import inner membrane translocase subunit tim8 a | 145 | 7.27E-33  | 80.40% | -  | 0 | IPR004217; PTHR21535 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 1984 | DMPC15244422_Speleonectes_tulumensis_1 | carcinolectin 5b partial                                       | 282 | 8.49E-34  | 69.10% | F:receptor binding; C:extracellular space; P:signal transduction   | 3 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER), tmhmm (TMHMM)   |
| 1985 | DMPC15244426_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4                       | 128 | 3.69E-08  | 72.00% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)            |
| 1986 | DMPC15244479_Speleonectes_tulumensis_2 | chitinase 1 precursor  | 201 | 6.94E-72  | 81.90% | F:hydrolase activity; P:carbohydrate metabolic process; P:catabolic process; F:binding; F:carbohydrate binding; C:extracellular region                                 | 6 | IPR001223; IPR011583; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF30 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                              |
| 1987 | DMPC15244524_Speleonectes_tulumensis_1 | thioredoxin peroxidase   | 166 | 1.40E-100 | 89.30% | -  | 0 | IPR000866; IPR012336; IPR019479; IPR024706; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)  |
| 1988 | DMPC15244538_Speleonectes_tulumensis_2 | venom allergen 5-like  | 246 | 4.77E-18  | 49.80% | C:extracellular region   | 1 | IPR001283; IPR014044; IPR018244  |
| 1989 | DMPC15244563_Speleonectes_tulumensis_2 | ferritin 1-like protein a                                      | 619 | 5.79E-45  | 64.80% | P:oxidation-reduction process; P:cellular iron ion homeostasis; F:oxidoreductase activity; F:transition metal ion binding; F:ferric iron binding; P:iron ion transport | 6 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; PTHR11431:SF5 (PANTHER)   |
| 1990 | DMPC15244577_Speleonectes_tulumensis_2 | peroxidasin-like protein                                       | 149 | 1.28E-27  | 62.60% | P:oxidation-reduction process; F:heme binding; P:response to oxidative stress; F:peroxidase activity; F:oxidoreductase activity; F:catalytic activity; F:FMN binding   | 7 | IPR002007; IPR010255; PTHR11475 (PANTHER)  |
| 1991 | DMPC15244598_Speleonectes_tulumensis_2 | extracellular alkaline serine protease                         | 149 | 4.54E-18  | 64.80% | F:peptidase activity   | 1 | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 1992 | DMPC15244654_Speleonectes_tulumensis_2 | zinc finger protein 43-like                                    | 66  | 1.79E-17  | 73.40% | -  | 0 | IPR007087; IPR013087; IPR015880; PTHR24382 (PANTHER), PTHR24382:SF0 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 1993 | DMPC15244754_Speleonectes_tulumensis_2 | gamma-glutamyl hydrolase-like                                  | 213 | 2.01E-21  | 69.40% | F:catalytic activity   | 1 | IPR015527; G3DSA:3.40.50.880 (GENE3D), PTHR11315:SF0 (PANTHER), SSF52317 (SUPERFAMILY)   |
| 1994 | DMPC15244811_Speleonectes_tulumensis_2 | trypsin  | 140 | 4.28E-57  | 77.70% | F:catalytic activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)   |
| 1995 | DMPC15244865_Speleonectes_tulumensis_1 | heat shock protein partial                                     | 175 | 2.12E-93  | 95.30% | F:nucleotide binding   | 1 | IPR013126; G3DSA:2.60.34.10 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), SSF100920 (SUPERFAMILY), SSF53067 (SUPERFAMILY)                           |
| 1996 | DMPC15244955_Speleonectes_tulumensis_1 | vitellogenic-like precursor                                    | 163 | 2.54E-30  | 70.90% | F:peptidase activity   | 1 | IPR001563; G3DSA:3.40.50.1820 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53474 (SUPERFAMILY)   |
| 1997 | DMPC15244975_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_308200                         | 149 | 9.83E-09  | 50.00% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 1998 | DMPC15244977_Speleonectes_tulumensis_1 | mantle protein 9   | 144 | 1.31E-08  | 67.67% | -  | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 1999 | DMPC15244979_Speleonectes_tulumensis_2 | peptidyl-prolyl cis-trans isomerase h-like                     | 101 | 3.40E-21  | 85.00% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3 | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF58 (PANTHER)   |
| 2000 | DMPC15245035_Speleonectes_tulumensis_1 | retinal dehydrogenase 1-like                                   | 157 | 1.23E-63  | 82.80% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016160; IPR016161; IPR016162; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2001 | DMPC15245040_Speleonectes_tulumensis_2 | h-2 class ii histocompatibility antigen gamma chain            | 89  | 5.05E-08  | 65.17% | P:multicellular organismal development   | 1 | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|      |  |  |     |          |        |   |   |   |
|------|--|--|-----|----------|--------|---|---|---|
| 2002 | DMPC15245053_Speleonectes_tulumensis_0 | thioredoxin 1                                | 108 | 4.03E-26 | 79.50% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process                  | 5 | IPR005746; IPR012336; IPR013766; PTHR10438:SF17 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2003 | DMPC15245069_Speleonectes_tulumensis_0 | chitinase partial                            | 100 | 5.63E-21 | 82.50% | F:hydrolase activity; F:binding; P:carbohydrate metabolic process; P:catabolic process  | 4 | IPR001223; IPR013781; IPR017853; PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                        |
| 2004 | DMPC15245086_Speleonectes_tulumensis_0 | ame: full=conoporin-cn1 flags: precursor     | 361 | 8.91E-22 | 51.10% | -   | 0 | IPR009104; IPR015926; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2005 | DMPC15245112_Speleonectes_tulumensis_0 | glyceraldehyde-3-phosphate dehydrogenase     | 173 | 2.22E-14 | 90.20% | F:nucleotide binding; P:carbohydrate metabolic process; F:catalytic activity; P:metabolic process   | 4 | IPR020831; tmhmm (TMHMM)  |
| 2006 | DMPC15245133_Speleonectes_tulumensis_2 | epididymal secretory protein e1 precursor    | 255 | 1.15E-09 | 58.00% | P:transport   | 1 | IPR003172; IPR014756; PTHR11306 (PANTHER)   |
| 2007 | DMPC15245138_Speleonectes_tulumensis_1 | saxiphilin precursor                         | 136 | 1.68E-10 | 68.30% | P:proteolysis; F:peptidase activity   | 2 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2008 | DMPC15245230_Speleonectes_tulumensis_2 | cathepsin 1                                  | 123 | 4.47E-26 | 87.50% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                       |
| 2009 | DMPC15245286_Speleonectes_tulumensis_2 | PREDICTED: hypothetical protein LOC100121115 | 100 | 5.28E-07 | 65.00% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF100895 (SUPERFAMILY)                                   |
| 2010 | DMPC15245310_Speleonectes_tulumensis_0 | histone h2a                                  | 208 | 4.48E-59 | 94.90% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus  | 4 | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)  |
| 2011 | DMPC15245378_Speleonectes_tulumensis_2 | serine protease                              | 135 | 4.76E-20 | 60.00% | F:hydrolase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF27 (PANTHER)                                       |
| 2012 | DMPC15245379_Speleonectes_tulumensis_2 | protein                                      | 137 | 6.07E-18 | 51.50% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; PTHR12036 (PANTHER), PTHR12036:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2013 | DMPC15245522_Speleonectes_tulumensis_1 | vitellogenin 2                               | 157 | 2.73E-11 | 49.70% | P:lipid transport; F:lipid transporter activity   | 2 | IPR001747; IPR015816; IPR015819; PTHR23345 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2014 | DMPC15245604_Speleonectes_tulumensis_0 | peroxiredoxin 4                              | 272 | 1.60E-61 | 88.80% | P:metabolic process; F:antioxidant activity; F:catalytic activity   | 3 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF46 (PANTHER), tmhmm (TMHMM)  |
| 2015 | DMPC15245618_Speleonectes_tulumensis_1 | cathepsin 1                                  | 153 | 8.02E-42 | 84.20% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                        |
| 2016 | DMPC15245647_Speleonectes_tulumensis_1 | epidermal retinol dehydrogenase 2            | 152 | 2.29E-39 | 72.10% | P:metabolic process   | 1 | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF51735 (SUPERFAMILY) |
| 2017 | DMPC15245749_Speleonectes_tulumensis_1 | ---NA---                                     | 147 |          |        | -   | 0 | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2018 | DMPC15245800_Speleonectes_tulumensis_1 | hemocyanin subunit type 2 precursor          | 176 | 1.82E-16 | 85.00% | -   | 0 | IPR005203; IPR013788; IPR014756; tmhmm (TMHMM)  |
| 2019 | DMPC15245833_Speleonectes_tulumensis_0 | protein                                      | 169 | 1.27E-17 | 75.00% | F:receptor binding; C:extracellular space; P:signal transduction  | 3 | IPR002181; IPR014715; IPR020837; PTHR19143 (PANTHER)  |
| 2020 | DMPC15245901_Speleonectes_tulumensis_2 | anti-lipoplysaccharide factor isoform 7      | 126 | 7.41E-27 | 62.90% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 2021 | DMPC15245937_Speleonectes_tulumensis_0 | trypsin                                      | 162 | 8.58E-24 | 58.30% | -   | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)  |
| 2022 | DMPC15245988_Speleonectes_tulumensis_0 | fibrinolytic enzyme                          | 110 | 1.60E-15 | 60.20% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                           |

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|------|--|---|-----|----------|--------|--|----|--|
| 2023 | DMPC15246049_Speleonectes tulumensis_2 | serine proteinase stubble-like                  | 207 | 5.67E-32 | 55.80% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity; F:hydrolase activity  | 4  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER)   |
| 2024 | DMPC15246058_Speleonectes tulumensis_0 | protein spaetzle                                | 198 | 1.01E-09 | 56.83% | -  | 0  | SSF57501 (SUPERFAMILY)   |
| 2025 | DMPC15246085_Speleonectes tulumensis_0 | ---NA---  | 119 |          |        | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24259 (PANTHER)   |
| 2026 | DMPC15246086_Speleonectes tulumensis_1 | glutathione peroxidase 1                        | 188 | 9.47E-59 | 79.50% | P:response to external stimulus; P:anatomical structure morphogenesis; P:multicellular organismal development; P:response to stress; P:response to abiotic stimulus; P:cell proliferation; P:catabolic process; P:regulation of biological process; P:cell death; P:cell differentiation; P:biological_process; P:cellular protein modification process; P:nucleobase-containing compound metabolic process; C:cytosol; F:catalytic activity; F:antioxidant activity; P:growth; P:cellular homeostasis; ; P:lipid metabolic process; F:enzyme regulator activity; P:mitochondrion organization; F:protein binding; P:regulation of gene expression, epigenetic; P:signal transduction; C:mitochondrion | 26 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 2027 | DMPC15246112_Speleonectes tulumensis_2 | cathepsin 1                                     | 210 | 3.99E-78 | 79.80% | -  | 0  | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY) |
| 2028 | DMPC15246180_Speleonectes tulumensis_2 | cre-nas-8 protein                               | 212 | 2.59E-11 | 60.60% | F:hydrolase activity   | 1  | IPR001506; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 2029 | DMPC15246223_Speleonectes tulumensis_1 | plasminogen activator spa                       | 135 | 6.76E-27 | 59.80% | -  | 0  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)    |
| 2030 | DMPC15246237_Speleonectes tulumensis_2 | carboxypeptidase b-like                         | 147 | 3.29E-42 | 59.10% | -  | 0  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF53187 (SUPERFAMILY)            |
| 2031 | DMPC15246251_Speleonectes tulumensis_2 | protein disulfide-isomerase a3-like             | 353 | 1.11E-71 | 82.90% | F:electron carrier activity; P:cellular homeostasis; P:regulation of biological process; P:metabolic process; F:catalytic activity; F:transferase activity; C:endoplasmic reticulum  | 7  | IPR005746; IPR005788; IPR012336; IPR013766; IPR017937; PTHR18929 (PANTHER), PTHR18929:SF32 (PANTHER)                     |
| 2032 | DMPC15246322_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor                  | 102 | 4.56E-14 | 63.90% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2033 | DMPC15246336_Speleonectes tulumensis_0 | saxiphilin precursor                            | 148 | 1.54E-10 | 63.70% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2034 | DMPC15246347_Speleonectes tulumensis_1 | calponin transgelin                             | 184 | 9.74E-78 | 86.60% | F:actin binding; P:cytoskeleton organization   | 2  | IPR001715; IPR001997; IPR003096; PTHR18959 (PANTHER), PTHR18959:SF3 (PANTHER)  |
| 2035 | DMPC15246370_Speleonectes tulumensis_0 | ferritin  | 134 | 1.70E-31 | 80.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347; SignalP-NN(euk) (SIGNALP)   |
| 2036 | DMPC15246381_Speleonectes tulumensis_0 | trypsinogen 2                                   | 116 | 4.14E-36 | 77.40% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 2037 | DMPC15246386_Speleonectes tulumensis_2 | hemagglutinin amebocyte aggregation factor-like | 136 | 2.41E-15 | 56.50% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |

|      |  |   |     |          |        |  |   |   |
|------|--|---|-----|----------|--------|--|---|---|
| 2038 | DMPC15246387_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor | 136 | 7.75E-12 | 57.40% | P:proteolysis; F:peptidase activity; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 6 | <a href="#">IPR000716</a> ; <a href="#">PTHR12352 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 2039 | DMPC15246415_Speleonectes_tulumensis_2 | cathepsin l                                     | 151 | 5.25E-69 | 79.20% | -  | 0 | <a href="#">IPR000668</a> ; <a href="#">IPR013128</a> ; <a href="#">IPR025660</a> ; <a href="#">IPR025661</a> ; <a href="#">G3DSA:3.90.70.10 (GENE3D)</a> , <a href="#">PTHR12411:SF149 (PANTHER)</a> , <a href="#">SSF54001 (SUPERFAMILY)</a>                              |
| 2040 | DMPC15246499_Speleonectes_tulumensis_0 | soma ferritin                                   | 112 | 3.98E-33 | 89.40% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 2041 | DMPC15246513_Speleonectes_tulumensis_2 | mhc class ii-associated invariant chain         | 169 | 1.59E-07 | 67.00% | P:multicellular organismal development   | 1 | <a href="#">IPR000716</a> ; <a href="#">IPR022339</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 2042 | DMPC15246594_Speleonectes_tulumensis_1 | soma ferritin                                   | 149 | 4.89E-39 | 83.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | <a href="#">IPR001519</a> ; <a href="#">IPR008331</a> ; <a href="#">IPR009040</a> ; <a href="#">IPR009078</a> ; <a href="#">IPR012347</a>   |
| 2043 | DMPC15246670_Speleonectes_tulumensis_2 | cathepsin q-like                                | 93  | 2.20E-08 | 69.00% | -  | 0 | <a href="#">IPR013128</a> ; <a href="#">IPR013201</a> ; <a href="#">G3DSA:3.90.70.10 (GENE3D)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF54001 (SUPERFAMILY)</a>  |
| 2044 | DMPC15246747_Speleonectes_tulumensis_2 | 26kda protease                                  | 306 | 3.35E-47 | 56.00% | F:catalytic activity   | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR001314</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24268 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> |
| 2045 | DMPC15246748_Speleonectes_tulumensis_2 | heat shock protein 70                           | 130 | 2.57E-32 | 88.90% | P:protein metabolic process; F:protein binding; F:nucleotide binding   | 3 | <a href="#">IPR013126</a> ; <a href="#">IPR018181</a> ; <a href="#">G3DSA:3.30.420.40 (GENE3D)</a> , <a href="#">PTHR19375 (PANTHER)</a> , <a href="#">PTHR19375:SF1 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">SSF53067 (SUPERFAMILY)</a>     |
| 2046 | DMPC15246760_Speleonectes_tulumensis_3 | interstitial collagenase                        | 155 | 1.63E-11 | 74.00% | F:binding; P:metabolic process; F:peptidase activity   | 3 | <a href="#">IPR000585</a> ; <a href="#">IPR018487</a> ; <a href="#">PTHR10201 (PANTHER)</a> , <a href="#">PTHR10201:SF96 (PANTHER)</a> , <a href="#">tmhmm (TMHMM)</a>  |
| 2047 | DMPC15246808_Speleonectes_tulumensis_0 | #NAME?  | 162 | 2.63E-63 | 79.80% | F:transferase activity; F:hydrolase activity; P:biosynthetic process; P:carbohydrate metabolic process   | 4 | <a href="#">IPR001830</a> ; <a href="#">G3DSA:3.40.50.2000 (GENE3D)</a> , <a href="#">PTHR10788 (PANTHER)</a> , <a href="#">PTHR10788:SF6 (PANTHER)</a> , <a href="#">SSF53756 (SUPERFAMILY)</a>  |
| 2048 | DMPC15246863_Speleonectes_tulumensis_2 | ankyrin repeat protein partial                  | 110 | 5.33E-14 | 61.50% | F:transferase activity   | 1 | <a href="#">IPR002110</a> ; <a href="#">IPR020683</a> ; <a href="#">PTHR24198 (PANTHER)</a>   |
| 2049 | DMPC15246899_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4        | 114 | 3.95E-11 | 56.80% | -  | 0 | <a href="#">IPR002350</a> ; <a href="#">G3DSA:3.30.60.30 (GENE3D)</a> , <a href="#">PTHR25189 (PANTHER)</a> , <a href="#">PTHR25189:SF0 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a> , <a href="#">SSF100895 (SUPERFAMILY)</a> |
| 2050 | DMPC15247051_Speleonectes_tulumensis_2 | trypsin-like serine proteinase 2                | 192 | 1.40E-31 | 60.40% | F:hydrolase activity   | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24275 (PANTHER)</a>   |
| 2051 | DMPC15247136_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor                  | 148 | 1.22E-34 | 73.80% | -  | 0 | <a href="#">IPR024509</a> ; <a href="#">IPR024716</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 2052 | DMPC15247169_Speleonectes_tulumensis_1 | alpha amylase                                   | 57  | 1.22E-11 | 81.20% | -  | 0 | <a href="#">IPR015902</a> ; <a href="#">PTHR10357:SF26 (PANTHER)</a>  |
| 2053 | DMPC15247217_Speleonectes_tulumensis_1 | cathepsin l-like                                | 137 | 1.40E-50 | 83.80% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | <a href="#">IPR000668</a> ; <a href="#">IPR013128</a> ; <a href="#">IPR025660</a> ; <a href="#">G3DSA:3.90.70.10 (GENE3D)</a> , <a href="#">PTHR12411:SF149 (PANTHER)</a> , <a href="#">SSF54001 (SUPERFAMILY)</a>  |
| 2054 | DMPC15247254_Speleonectes_tulumensis_0 | lysozyme precursor                              | 103 | 1.79E-08 | 63.00% | -  | 0 | <a href="#">IPR001916</a> ; <a href="#">IPR023346</a> ; <a href="#">G3DSA:1.10.530.10 (GENE3D)</a> , <a href="#">PTHR11407 (PANTHER)</a> , <a href="#">PTHR11407:SF2 (PANTHER)</a>  |
| 2055 | DMPC15247271_Speleonectes_tulumensis_2 | serine protease 137 precursor                   | 98  | 5.65E-16 | 62.80% | F:peptidase activity   | 1 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24264 (PANTHER)</a> , <a href="#">PTHR24264:SF0 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>                   |
| 2056 | DMPC15247311_Speleonectes_tulumensis_0 | orcokinin precursor                             | 206 | 2.56E-19 | 51.38% | -  | 0 | no IPS match  |



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|------|--|---|-----|----------|--------|--|----|---|
| 2057 | DMPC15247361_Speleonectes_tulumensis_0 | ribosomal protein ubq 140e  | 174 | 8.98E-86 | 98.90% | C:cytoskeleton; C:protein complex; F:structural molecule activity; C:lipid particle; P:cellular protein modification process; P:protein metabolic process; P:catabolic process; C:ribosome; C:cytosol; P:translation | 10 | IPR000626; IPR001975; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)       |
| 2058 | DMPC15247373_Speleonectes_tulumensis_1 | chitinase 1 precursor   | 162 | 5.41E-67 | 72.90% | P:carbohydrate metabolic process; F:hydrolase activity   | 2  | IPR001223; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), PTHR11177:SF30 (PANTHER), SSF54556 (SUPERFAMILY)   |
| 2059 | DMPC15247375_Speleonectes_tulumensis_0 | epididymal secretory protein e1                                   | 107 | 1.05E-15 | 61.40% | F:cholesterol binding; F:cholesterol homeostasis; C:lysosome; F:enzyme binding; P:cholesterol efflux; P:response to virus; P:intracellular cholesterol transport; C:cytoskeleton                                     | 8  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2060 | DMPC15247419_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 1                          | 178 | 7.34E-23 | 52.90% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SSF100895 (SUPERFAMILY)                        |
| 2061 | DMPC15247508_Speleonectes_tulumensis_2 | trypsinogen 2   | 105 | 2.71E-24 | 68.00% | -  | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 2062 | DMPC15247509_Speleonectes_tulumensis_1 | soma ferritin   | 111 | 4.97E-27 | 88.90% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 2063 | DMPC15247576_Speleonectes_tulumensis_2 | ---NA---  | 107 |          |        | -  | 0  | SignalP-NN(euk) (SIGNALP)   |
| 2064 | DMPC15247592_Speleonectes_tulumensis_0 | epidermal retinol dehydrogenase 2-like                            | 203 | 1.50E-62 | 74.30% | P:metabolic process  | 1  | IPR002198; IPR002347; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SSF51735 (SUPERFAMILY)                               |
| 2065 | DMPC15247614_Speleonectes_tulumensis_2 | cathepsin 1 precursor   | 156 | 2.15E-51 | 80.70% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3  | IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)                       |
| 2066 | DMPC15247822_Speleonectes_tulumensis_2 | stress-70 mitochondrial   | 120 | 2.89E-25 | 91.10% | P:protein metabolic process; F:protein binding; F:nucleotide binding   | 3  | IPR013126; IPR018181; G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF53067 (SUPERFAMILY)              |
| 2067 | DMPC15247886_Speleonectes_tulumensis_0 | collagen and calcium-binding egf domain-containing protein 1-like | 155 | 5.96E-43 | 64.60% | F:binding; C:intracellular; P:protein metabolic process  | 3  | G3DSA:2.10.25.10 (GENE3D), PTHR24023 (PANTHER), PTHR24023:SF13 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                  |
| 2068 | DMPC15247966_Speleonectes_tulumensis_0 | epididymal secretory protein e1 isoform 1                         | 141 | 2.21E-20 | 58.20% | P:biological_process; C:lysosome; P:transport; F:protein binding; P:response to biotic stimulus; F:lipid binding   | 6  | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2069 | DMPC15248074_Speleonectes_tulumensis_2 | hatching enzyme   | 257 | 8.47E-41 | 64.00% | F:peptidase activity   | 1  | IPR001506; IPR006026; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 2070 | DMPC15248190_Speleonectes_tulumensis_2 | sphingomyelin phosphodiesterase                                   | 197 | 7.29E-60 | 66.70% | C:organelle; C:intracellular; P:metabolic process; P:regulation of biological process; P:lipid metabolic process; F:hydrolase activity; P:signal transduction; C:cytoplasm; P:cellular protein modification process  | 9  | IPR004843; G3DSA:3.60.21.10 (GENE3D), PTHR10340 (PANTHER), PTHR10340:SF13 (PANTHER), SSF56300 (SUPERFAMILY)                         |
| 2071 | DMPC15248228_Speleonectes_tulumensis_1 | trypsin partial   | 104 | 8.27E-09 | 58.80% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)                                     |
| 2072 | DMPC15248259_Speleonectes_tulumensis_1 | protein vit-4   | 171 | 9.57E-15 | 54.70% | P:embryo development; P:behavior; P:reproduction; P:regulation of biological process; P:growth; P:multicellular organismal development   | 6  | IPR001846   |
| 2073 | DMPC15248310_Speleonectes_tulumensis_0 | ---NA---  | 292 |          |        | -  | 0  | IPR006207; tmhmm (TMHMM)  |

|      |  |  |     |          |        |  |   |  |
|------|--|--|-----|----------|--------|--|---|--|
| 2074 | DMPC15248324_Speleonectes_tulumensis_1 | serine protease 52-like  | 124 | 1.06E-18 | 63.10% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP) |
| 2075 | DMPC15248388_Speleonectes_tulumensis_1 | cysteine protease family   | 134 | 1.51E-16 | 85.00% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)           |
| 2076 | DMPC15248403_Speleonectes_tulumensis_0 | chitinase domain-containing protein 1                                  | 197 | 1.74E-42 | 67.40% | F:catalytic activity   | 1 | IPR017853; PTHR11177 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2077 | DMPC15248435_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_311761                                 | 428 | 5.26E-95 | 62.20% | -  | 0 | IPR003128; IPR007122; IPR007123; IPR015627; G3DSA:3.40.20.10 (GENE3D), SSF55753 (SUPERFAMILY)                            |
| 2078 | DMPC15248446_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor                        | 132 | 2.49E-11 | 59.10% | P:proteolysis; F:peptidase activity; F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 6 | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2079 | DMPC15248498_Speleonectes_tulumensis_1 | dehydrogenase reductase sdr family member 11-like                      | 166 | 1.71E-40 | 78.70% | F:catalytic activity; P:metabolic process; F:nucleotide binding  | 3 | IPR002198; IPR002347; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF7 (PANTHER), SSF51735 (SUPERFAMILY)                    |
| 2080 | DMPC15248562_Speleonectes_tulumensis_0 | manganese superoxide dismutase   | 98  | 7.33E-20 | 85.80% | F:binding; P:metabolic process; F:catalytic activity   | 3 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 2081 | DMPC15248571_Speleonectes_tulumensis_0 | protein giant-lens-like  | 145 | 1.82E-73 | 78.80% | -  | 0 | IPR021633  |
| 2082 | DMPC15248593_Speleonectes_tulumensis_2 | tissue factor pathway inhibitor 2 precursor                            | 259 | 5.84E-28 | 57.90% | F:serine-type endopeptidase inhibitor activity   | 1 | IPR002223; IPR020901; PTHR10083 (PANTHER)  |
| 2083 | DMPC15248746_Speleonectes_tulumensis_0 | glycosyl-phosphatidylinositol-linked carbonic anhydrase                | 121 | 4.92E-14 | 55.00% | F:carbonate dehydratase activity   | 1 | IPR001148; IPR023561; SignalP-NN(euk) (SIGNALP)  |
| 2084 | DMPC15248819_Speleonectes_tulumensis_1 | ame: full= cytoplasmic ame: full=actin-depolymerizing factor short=adf | 154 | 1.75E-53 | 69.80% | F:actin binding  | 1 | IPR007122; IPR007123; G3DSA:3.40.20.10 (GENE3D), PTHR11977:SF11 (PANTHER), SSF55753 (SUPERFAMILY)                        |
| 2085 | DMPC15248890_Speleonectes_tulumensis_0 | PREDICTED: zonadhesin-like   | 316 | 8.55E-10 | 50.00% | -  | 0 | no IPS match   |
| 2086 | DMPC15249053_Speleonectes_tulumensis_1 | probable carboxypeptidase pm20d1-like                                  | 220 | 5.73E-47 | 70.30% | F:hydrolase activity; P:metabolic process; F:carboxypeptidase activity   | 3 | G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF9 (PANTHER), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)          |
| 2087 | DMPC15249071_Speleonectes_tulumensis_0 | cathepsin 1  | 142 | 1.27E-57 | 81.90% | F:peptidase activity; P:protein metabolic process; P:catabolic process   | 3 | IPR000169; IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)            |
| 2088 | DMPC15249098_Speleonectes_tulumensis_1 | dermatopontin 2  | 197 | 1.19E-35 | 59.20% | -  | 0 | IPR026645  |
| 2089 | DMPC15249127_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor                        | 146 | 3.62E-22 | 52.90% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                      | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2090 | DMPC15249131_Speleonectes_tulumensis_1 | trypsinogen 2  | 265 | 4.49E-53 | 60.30% | -  | 0 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24276 (PANTHER)  |
| 2091 | DMPC15249237_Speleonectes_tulumensis_0 | apolipoprotein d   | 145 | 4.63E-09 | 47.25% | F:pigment binding; F:lipid binding; C:extracellular region; P:transport; F:transporter activity  | 5 | IPR000566; IPR011038; IPR012674; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)                 |
| 2092 | DMPC15249255_Speleonectes_tulumensis_0 | manganese superoxide dismutase   | 116 | 1.06E-20 | 85.60% | -  | 0 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 2093 | DMPC15249295_Speleonectes_tulumensis_1 | ferritin gfl   | 110 | 2.05E-30 | 88.70% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2094 | DMPC15249377_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor                        | 148 | 1.84E-21 | 52.00% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity                                      | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

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|------|--|---|-----|----------|--------|--|---|--|
| 2095 | DMPC15249380_Speleonectes tulumensis_2 | serine protease inhibitor                       | 153 | 8.43E-18 | 55.90% | -  | 0 | IPR000215; IPR023796; G3DSA:2.30.39.10 (GENE3D), G3DSA:3.30.497.10 (GENE3D)                                    |
| 2096 | DMPC15249433_Speleonectes tulumensis_1 | histone partial                                 | 124 | 4.24E-32 | 98.00% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4 | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)   |
| 2097 | DMPC15249436_Speleonectes tulumensis_1 | hemagglutinin amebocyte aggregation factor      | 115 | 5.68E-09 | 63.90% | -  | 0 | IPR026645  |
| 2098 | DMPC15249440_Speleonectes tulumensis_1 | neuferricin-like isoform 3                      | 279 | 3.75E-19 | 78.00% | P:nervous system development; F:heme binding; C:extracellular region   | 3 | PTHR10281 (PANTHER)  |
| 2099 | DMPC15249512_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor isoform 7        | 135 | 4.88E-29 | 68.80% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2100 | DMPC15249596_Speleonectes tulumensis_2 | dermatopontin 3                                 | 101 | 3.34E-08 | 57.00% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2101 | DMPC15249758_Speleonectes tulumensis_2 | ---NA---  | 146 |          |        | -  | 0 | IPR011038; IPR012674; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2102 | DMPC15249853_Speleonectes tulumensis_0 | ferritin h subunit                              | 110 | 7.17E-20 | 91.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2103 | DMPC15249916_Speleonectes tulumensis_0 | sortilin-related receptor-like                  | 98  | 1.55E-07 | 76.00% | -  | 0 | IPR002172; IPR023415; PTHR10529 (PANTHER), PTHR10529:SF116 (PANTHER)   |
| 2104 | DMPC15250033_Speleonectes tulumensis_2 | down syndrome cell adhesion molecule            | 137 | 1.81E-12 | 77.20% | F:nucleic acid binding   | 1 | IPR003961; IPR013783; PTHR10489 (PANTHER), PTHR10489:SF165 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 2105 | DMPC15250034_Speleonectes tulumensis_1 | annexin isoform a                               | 433 | 9.12E-62 | 70.30% | F:actin binding; F:calcium ion binding; F:lipid binding  | 3 | IPR001464; IPR018252; IPR018502; SignalP-NN(euk) (SIGNALP)   |
| 2106 | DMPC15250064_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor-like | 96  | 1.04E-08 | 64.50% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2107 | DMPC15250099_Speleonectes tulumensis_1 | hemocyanin subunit type 1 precursor             | 437 | 0        | 77.20% | -  | 0 | IPR000896; IPR002227; IPR005203; IPR008922; IPR013788; IPR014756   |
| 2108 | DMPC15250350_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor                  | 144 | 8.29E-31 | 68.10% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2109 | DMPC15250392_Speleonectes tulumensis_0 | trypsin 7                                       | 152 | 8.15E-31 | 77.40% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)                                |
| 2110 | DMPC15250400_Speleonectes tulumensis_1 | metalloprotease ii                              | 151 | 3.78E-18 | 58.80% | P:proteolysis; F:serine-type endopeptidase activity; P:negative regulation of catalytic activity; F:identical protein binding  | 4 | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 2111 | DMPC15250428_Speleonectes tulumensis_2 | anti-lipopolysaccharide factor isoform 7        | 100 | 1.02E-08 | 56.30% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2112 | DMPC15250526_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor                  | 148 | 5.99E-29 | 66.80% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2113 | DMPC15250536_Speleonectes tulumensis_2 | proclotting enzyme                              | 292 | 2.00E-60 | 57.90% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)                     |
| 2114 | DMPC15250556_Speleonectes tulumensis_2 | ankyrin unc44                                   | 160 | 1.75E-38 | 87.70% | P:signal transduction; F:hydrolase activity  | 2 | IPR002110; IPR020683; PTHR24123 (PANTHER), PTHR24123:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2115 | DMPC15250604_Speleonectes tulumensis_1 | anti-lipopolysaccharide factor isoform 7        | 98  | 2.68E-12 | 61.80% | -  | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2116 | DMPC15250649_Speleonectes tulumensis_2 | enolase   | 80  | 7.07E-21 | 92.20% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process | 7 | IPR000941; IPR020810; G3DSA:3.20.20.120 (GENE3D), SSF51604 (SUPERFAMILY)                                       |
| 2117 | DMPC15250684_Speleonectes tulumensis_2 | histone h2 z                                    | 79  | 1.78E-21 | 95.00% | C:chromosome; F:DNA binding; P:organelle organization; C:nucleus   | 4 | IPR002119; IPR007125; IPR009072; PTHR23430 (PANTHER)   |

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|------|--|--|-----|-----------|--------|---|---|--|
| 2118 | DMPC15250705_Speleonectes_tulumensis_1 | zgc:101788 protein   | 149 | 6.11E-29  | 60.10% | F:peptidase activity  | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                   |
| 2119 | DMPC15250730_Speleonectes_tulumensis_0 | guanine nucleotide-binding protein subunit beta-like protein               | 231 | 9.43E-152 | 94.30% | F:receptor activity; F:kinase activity; P:metabolic process                                 | 3 | IPR001680; IPR015943; IPR017986; IPR019775; IPR020472; PTHR19868 (PANTHER), PTHR19868.SF0 (PANTHER)  |
| 2120 | DMPC15250770_Speleonectes_tulumensis_0 | ---NA---   | 123 |           |        | -   | 0 | no IPS match   |
| 2121 | DMPC15250787_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor                                 | 122 | 3.66E-13  | 61.60% | -   | 0 | IPR026645  |
| 2122 | DMPC15250845_Speleonectes_tulumensis_1 | semaphorin-2a-like isoform 1   | 103 | 1.48E-58  | 95.70% | -   | 0 | IPR001627; IPR015943; IPR027231; PTHR11036.SF6 (PANTHER)   |
| 2123 | DMPC15250852_Speleonectes_tulumensis_0 | leucine-rich repeat and calponin homology domain-containing protein 1-like | 209 | 1.04E-55  | 77.50% | -   | 0 | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR23155 (PANTHER), PTHR23155.SF10 (PANTHER), PF13855 (PFAM), SSF52058 (SUPERFAMILY)                 |
| 2124 | DMPC15250907_Speleonectes_tulumensis_2 | gamma-interferon-inducible lysosomal thiol reductase                       | 146 | 2.18E-29  | 60.70% | -   | 0 | IPR004911; SignalP-NN(euk) (SIGNALP)   |
| 2125 | DMPC15250939_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4                                   | 114 | 2.93E-14  | 55.30% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)   |
| 2126 | DMPC15250951_Speleonectes_tulumensis_0 | vitellogenin 2   | 240 | 3.96E-32  | 50.50% | -   | 0 | IPR001846  |
| 2127 | DMPC15251109_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor   | 152 | 5.73E-31  | 67.20% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2128 | DMPC15251163_Speleonectes_tulumensis_1 | follistatin-related protein  | 115 | 4.14E-24  | 68.50% | P:signal transduction; C:extracellular region; P:cell differentiation; P:embryo development | 4 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913.SF13 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 2129 | DMPC15251304_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor                                 | 135 | 1.15E-13  | 61.90% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2130 | DMPC15251343_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor   | 145 | 2.28E-30  | 68.50% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2131 | DMPC15251416_Speleonectes_tulumensis_0 | basement membrane-specific heparan sulfate proteoglycan core               | 97  | 3.14E-15  | 71.40% | -   | 0 | IPR007110; IPR013783; PF13895 (PFAM), SSF48726 (SUPERFAMILY)   |
| 2132 | DMPC15251442_Speleonectes_tulumensis_2 | glucose dehydrogenase  | 383 | 3.07E-17  | 80.30% | F:nucleotide binding; P:metabolic process; F:catalytic activity                             | 3 | IPR007867; G3DSA:3.50.50.60 (GENE3D), PTHR11552 (PANTHER), PTHR11552.SF10 (PANTHER), tmhmm (TMHMM), SSF51905 (SUPERFAMILY)                             |
| 2133 | DMPC15251467_Speleonectes_tulumensis_0 | probable serine carboxypeptidase cpvl precursor                            | 97  | 2.63E-23  | 65.60% | P:proteolysis; F:carboxypeptidase activity; F:serine-type carboxypeptidase activity         | 3 | no IPS match   |
| 2134 | DMPC15251484_Speleonectes_tulumensis_0 | ---NA---   | 129 |           |        | -   | 0 | IPR000941; IPR020810; G3DSA:3.20.20.120 (GENE3D), tmhmm (TMHMM)  |
| 2135 | DMPC15251602_Speleonectes_tulumensis_1 | cathepsin 1-like   | 127 | 5.93E-25  | 85.80% | F:peptidase activity; P:protein metabolic process; P:catabolic process                      | 3 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411.SF149 (PANTHER), SSF54001 (SUPERFAMILY)                              |
| 2136 | DMPC15251610_Speleonectes_tulumensis_0 | leucine-rich repeat-containing protein 49                                  | 148 | 1.49E-54  | 78.90% | -   | 0 | IPR001611; IPR003591; IPR025875; G3DSA:3.80.10.10 (GENE3D), PTHR10588 (PANTHER), PTHR10588.SF5 (PANTHER), SM00365 (SMART), SSF52058 (SUPERFAMILY)      |
| 2137 | DMPC15251666_Speleonectes_tulumensis_1 | ---NA---   | 108 |           |        | -   | 0 | IPR003172; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2138 | DMPC15251709_Speleonectes_tulumensis_1 | mitochondrial aldehyde dehydrogenase                                       | 121 | 1.43E-48  | 81.30% | F:catalytic activity; P:metabolic process   | 2 | IPR015590; IPR016160; IPR016161; IPR016162; PTHR11699 (PANTHER), PTHR11699.SF46 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |
| 2139 | DMPC15251730_Speleonectes_tulumensis_1 | ecdysteroid-regulated 16 kda protein                                       | 150 | 2.81E-12  | 55.10% | -   | 0 | IPR003172; IPR014756; PTHR11306 (PANTHER)  |

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|------|--|---|-----|----------|--------|---|----|---|
| 2140 | DMPC15251797_Speleonectes_tulumensis_2 | hmet_bommo ame: full=hemocytin ame: full=humoral lectin flags: precursor  | 177 | 1.76E-18 | 50.60% | F:nucleic acid binding; F:carbohydrate binding; P:cell adhesion; F:zinc ion binding; F:chitin binding; P:chitin metabolic process; C:extracellular region   | 7  | IPR001846; G3DSA:2.10.25.10 (GENE3D), PTHR11339 (PANTHER)   |
| 2141 | DMPC15251878_Speleonectes_tulumensis_2 | ---NA---  | 280 |          |        | -   | 0  | IPR007947; PTHR11337 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2142 | DMPC15251950_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor  | 120 | 7.56E-11 | 61.60% | -   | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)  |
| 2143 | DMPC15251973_Speleonectes_tulumensis_0 | ubiquitin family protein  | 201 | 3.42E-44 | 98.00% | P:cell cycle; P:signal transduction; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:transport | 22 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), tmhmm (TMHMM), SSF54236 (SUPERFAMILY) |
| 2144 | DMPC15251990_Speleonectes_tulumensis_1 | ---NA---  | 200 |          |        | -   | 0  | IPR008197; PTHR14131 (PANTHER), PTHR14131:SF0 (PANTHER)   |
| 2145 | DMPC15252013_Speleonectes_tulumensis_1 | angiotensin-converting enzyme   | 186 | 1.01E-34 | 79.30% | C:cell; F:peptidase activity; P:protein metabolic process; P:catabolic process  | 4  | IPR001548; tmhmm (TMHMM), SSF55486 (SUPERFAMILY)  |
| 2146 | DMPC15252040_Speleonectes_tulumensis_2 | phospholipase a2  | 247 | 1.09E-38 | 62.50% | F:phosphonase activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process;   | 5  | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP)  |
| 2147 | DMPC15252109_Speleonectes_tulumensis_0 | ame: full=prohormone-1 contains: ame: full=brain peptide lmqldigdlq contains: ame: full=brain peptide lmqldigdl contains: ame: full=brain peptide sywkqcafnavscf-amide flags: precursor | 162 | 1.25E-32 | 76.90% | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2148 | DMPC15252162_Speleonectes_tulumensis_0 | chloride channel accessory 2-like   | 156 | 1.09E-24 | 53.30% | -   | 0  | IPR013642; PTHR10579 (PANTHER), PTHR10579:SF7 (PANTHER)   |
| 2149 | DMPC15252180_Speleonectes_tulumensis_1 | chh xo- variant 4   | 146 | 6.44E-09 | 68.78% | F:neuropeptide hormone activity; C:extracellular region   | 2  | IPR001166; tmhmm (TMHMM)  |
| 2150 | DMPC15252185_Speleonectes_tulumensis_1 | vascular endothelial growth factor receptor 1-like  | 138 | 2.80E-13 | 46.50% | F:ATP binding; F:protein kinase activity; P:protein phosphorylation   | 3  | IPR013783; SSF48726 (SUPERFAMILY)   |
| 2151 | DMPC15252219_Speleonectes_tulumensis_5 | cg1504  | 159 | 3.51E-66 | 78.60% | -   | 0  | IPR001611; IPR003591; IPR026906; G3DSA:3.80.10.10 (GENE3D), PTHR24367 (PANTHER), SM00365 (SMART), SSF52058 (SUPERFAMILY)          |
| 2152 | DMPC15252400_Speleonectes_tulumensis_0 | na(+) h(+) exchange regulatory cofactor nhe-rf2-like  | 210 | 2.87E-49 | 79.60% | -   | 0  | IPR001478; G3DSA:2.30.42.10 (GENE3D), PTHR14191 (PANTHER), PTHR14191:SF0 (PANTHER)  |

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|------|--|--|-----|----------|--------|--|----|---|
| 2153 | DMPC15252542_Speleonectes_tulumensis_0 | beta- -galactosyltransferase 1             | 72  | 2.87E-10 | 81.60% | P:response to external stimulus; P:anatomical structure morphogenesis; P:multicellular organismal development; P:response to stress; P:transport; P:reproduction; P:regulation of biological process; P:biological_process; C:external encapsulating structure; P:biosynthetic process; P:carbohydrate metabolic process; C:plasma membrane; P:cellular component organization; F:transferase activity; C:cell; P:cell proliferation; C:extracellular region; F:binding; F:cytoskeletal protein binding; P:cell recognition; P:cellular protein modification process; C:Golgi apparatus; F:protein binding; P:cell differentiation; P:cell death | 25 | IPR003859; G3DSA:3.90.550.10 (GENE3D), PTHR19300:SF5 (PANTHER), PF13733 (PFAM)  |
| 2154 | DMPC15252543_Speleonectes_tulumensis_2 | low quality protein: reticulocalbin-2-like | 64  | 5.41E-17 | 85.60% | F:calcium ion binding  | 1  | PTHR10827 (PANTHER), PTHR10827:SF38 (PANTHER)   |
| 2155 | DMPC15252546_Speleonectes_tulumensis_1 | arylsulfatase i-like                       | 104 | 9.61E-18 | 64.40% | P:metabolic process; F:catalytic activity; F:sulfuric ester hydrolase activity   | 3  | IPR000917; IPR017849; IPR017850; PTHR10342 (PANTHER), PTHR10342:SF19 (PANTHER)  |
| 2156 | DMPC15252556_Speleonectes_tulumensis_2 | cationic trypsin-3-like                    | 120 | 4.44E-15 | 55.10% | F:catalytic activity   | 1  | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24276 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>                             |
| 2157 | DMPC15252622_Speleonectes_tulumensis_1 | sphingomyelin phosphodiesterase            | 113 | 4.31E-13 | 62.20% | F:hydrolase activity; F:sphingomyelin phosphodiesterase activity; P:sphingomyelin catabolic process  | 3  | G3DSA:3.60.21.10 (GENE3D), PTHR10340 (PANTHER), PTHR10340:SF13 (PANTHER)  |
| 2158 | DMPC15252648_Speleonectes_tulumensis_1 | peptidase inhibitor partial                | 333 | 3.85E-15 | 57.40% | C:extracellular region   | 1  | IPR001283; IPR002172; IPR014044; IPR018244; IPR023415; PTHR10334:SF25 (PANTHER)   |
| 2159 | DMPC15252706_Speleonectes_tulumensis_2 | extracellular cyanophycinase               | 172 | 2.04E-14 | 49.67% | -  | 0  | <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 2160 | DMPC15252762_Speleonectes_tulumensis_0 | si:dkey- protein                           | 103 | 3.85E-09 | 64.29% | -  | 0  | <a href="#">IPR026645</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm (TMHMM)</a>   |
| 2161 | DMPC15252792_Speleonectes_tulumensis_2 | plasminogen activator spa                  | 98  | 6.86E-15 | 62.10% | -  | 0  | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">IPR018114</a> ; <a href="#">G3DSA:2.40.10.10 (GENE3D)</a> , <a href="#">PTHR24276 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a>                             |
| 2162 | DMPC15252812_Speleonectes_tulumensis_2 | ---NA---                                   | 157 | -        | -      | -  | 0  | <a href="#">IPR002350</a> ; <a href="#">G3DSA:3.30.60.30 (GENE3D)</a> , <a href="#">PTHR21312 (PANTHER)</a> , <a href="#">PTHR21312:SF8 (PANTHER)</a> , <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">SSF100895 (SUPERFAMILY)</a> |
| 2163 | DMPC15252844_Speleonectes_tulumensis_0 | ubiquitin-40s ribosomal protein s27a       | 132 | 1.11E-48 | 97.30% | P:cell cycle; P:metabolic process; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; P:translation; F:binding; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; P:cellular component organization; C:plasma membrane; P:protein transport; ; C:endosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; C:ribosome; C:cytosol; P:cellular protein modification process; P:transport                               | 27 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)  |

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|------|--|---|-----|----------|--------|--|---|--|
| 2164 | DMPC15252914_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor           | 131 | 9.29E-22 | 52.20% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding | 6 | IPR000716; IPR022339   |
| 2165 | DMPC15252917_Speleonectes_tulumensis_2 | selenium-dependent glutathione peroxidase                 | 135 | 2.17E-37 | 80.20% | -  | 0 | IPR000889; IPR012336; PTHR11592:SF0 (PANTHER)  |
| 2166 | DMPC15252978_Speleonectes_tulumensis_2 | soma ferritin   | 104 | 2.49E-22 | 84.10% | -  | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2167 | DMPC15253042_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor                | 108 | 1.83E-08 | 57.10% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2168 | DMPC15253088_Speleonectes_tulumensis_1 | dnaj homolog subfamily b member 11-like                   | 138 | 1.30E-35 | 88.40% | P:protein metabolic process; F:protein binding   | 2 | IPR001623; IPR018253; PTHR24077 (PANTHER), PTHR24077:SF14 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2169 | DMPC15253091_Speleonectes_tulumensis_2 | ---NA---  | 157 | -        | -      | -  | 0 | IPR001199; PTHR10281 (PANTHER), PTHR10281:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2170 | DMPC15253135_Speleonectes_tulumensis_1 | iron zinc purple acid phosphatase-like                    | 235 | 6.53E-58 | 79.40% | F:binding; F:hydrolase activity  | 2 | IPR025733; G3DSA:3.60.21.10 (GENE3D), PTHR22953 (PANTHER), PTHR22953:SF0 (PANTHER), tmhmm (TMHMM), SSF56300 (SUPERFAMILY)                              |
| 2171 | DMPC15253146_Speleonectes_tulumensis_0 | kazal-type serine proteinase inhibitor 4                  | 142 | 5.47E-17 | 58.80% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR10913 (PANTHER), PTHR10913:SF21 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 2172 | DMPC15253150_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor           | 149 | 3.71E-21 | 51.70% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity; P:cell-matrix adhesion; F:calcium ion binding | 6 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2173 | DMPC15253159_Speleonectes_tulumensis_0 | enolase   | 218 | 1.26E-19 | 95.80% | C:cytosol; C:protein complex; F:catalytic activity; F:binding; P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process                             | 7 | IPR000941; IPR020810; G3DSA:3.20.20.120 (GENE3D), tmhmm (TMHMM), SSF51604 (SUPERFAMILY)  |
| 2174 | DMPC15253218_Speleonectes_tulumensis_2 | thioredoxin peroxidase                                    | 115 | 3.39E-35 | 86.60% | -  | 0 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF50 (PANTHER)  |
| 2175 | DMPC15253238_Speleonectes_tulumensis_2 | hemocyte protein-glutamine gamma-glutamyltransferase-like | 261 | 1.05E-64 | 72.50% | -  | 0 | IPR008958; IPR013783; IPR023608; PTHR11590:SF17 (PANTHER)  |
| 2176 | DMPC15253376_Speleonectes_tulumensis_1 | protein lethal giant larvae-like                          | 188 | 7.53E-71 | 80.00% | -  | 0 | IPR000664; PTHR10241 (PANTHER), PTHR10241:SF10 (PANTHER)   |
| 2177 | DMPC15253406_Speleonectes_tulumensis_1 | lipophorin receptor                                       | 240 | 3.10E-14 | 62.40% | F:calcium ion binding; C:integral to membrane; C:membrane; F:receptor activity   | 4 | IPR002172; IPR023415; PR00261 (PRINTS), PTHR10529 (PANTHER), tmhmm (TMHMM)   |
| 2178 | DMPC15253421_Speleonectes_tulumensis_0 | trypsin   | 183 | 3.48E-35 | 78.30% | F:catalytic activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)  |
| 2179 | DMPC15253425_Speleonectes_tulumensis_5 | low quality protein: protein dachsous-like                | 78  | 1.28E-21 | 71.90% | C:cell; P:biological_process   | 2 | IPR002126; IPR015919; IPR020894; PTHR24027 (PANTHER), PTHR24027:SF53 (PANTHER)   |
| 2180 | DMPC15253445_Speleonectes_tulumensis_2 | isoform a   | 95  | 9.06E-15 | 61.90% | F:calcium ion binding; C:integral to membrane; C:membrane  | 3 | IPR002172; PR00261 (PRINTS), PTHR10529 (PANTHER)   |
| 2181 | DMPC15253469_Speleonectes_tulumensis_0 | superoxide dismutase                                      | 449 | 6.84E-43 | 82.70% | F:binding; P:metabolic process; F:catalytic activity   | 3 | IPR001424; IPR024134; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2182 | DMPC15253488_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor                       | 145 | 4.62E-46 | 68.80% | -  | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2183 | DMPC15253537_Speleonectes_tulumensis_0 | ---NA---  | 52  | -        | -      | -  | 0 | no IPS match   |

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|------|--|--|-----|-----------|--------|---|----|--|
| 2184 | DMPC15253556_Speleonectes_tulumensis_2 | epidermal retinol dehydrogenase 2 isoform 2      | 109 | 2.91E-09  | 70.40% | P:lipid metabolic process; P:secondary metabolic process; F:catalytic activity; P:cell proliferation; C:endoplasmic reticulum   | 5  | IPR002198; IPR016040; PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY)                  |
| 2185 | DMPC15253563_Speleonectes_tulumensis_2 | trypsin 2  | 158 | 3.69E-21  | 57.00% | F:hydrolase activity  | 1  | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)              |
| 2186 | DMPC15253609_Speleonectes_tulumensis_1 | anti-lipopolsaccharide factor isoform 7          | 125 | 5.47E-12  | 57.30% | -   | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2187 | DMPC15253682_Speleonectes_tulumensis_2 | plasminogen activator spa                        | 116 | 5.39E-11  | 55.60% | -   | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)                             |
| 2188 | DMPC15253734_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_308200           | 131 | 4.24E-08  | 52.00% | -   | 0  | IPR020234; SignalP-NN(euk) (SIGNALP)   |
| 2189 | DMPC15253927_Speleonectes_tulumensis_0 | protein lethal giant larvae-like isoform 2       | 131 | 1.89E-41  | 75.80% | P:multicellular organismal development  | 1  | IPR000664; IPR001680; IPR015943; IPR019775; PTHR10241 (PANTHER), PTHR10241:SF21 (PANTHER)  |
| 2190 | DMPC15253954_Speleonectes_tulumensis_1 | secreted salivary gland                          | 338 | 3.57E-42  | 54.90% | F:hydrolase activity  | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)                  |
| 2191 | DMPC15253959_Speleonectes_tulumensis_0 | 60s ribosomal protein l40                        | 119 | 1.63E-45  | 96.50% | C:ribosome; F:structural molecule activity; P:translation   | 3  | IPR000626; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                                |
| 2192 | DMPC15254006_Speleonectes_tulumensis_1 | midgut glutamate specific carboxypeptidase       | 117 | 3.25E-15  | 59.80% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion binding  | 4  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)           |
| 2193 | DMPC15254035_Speleonectes_tulumensis_2 | ---NA---   | 122 |           |        | -   | 0  | IPR000716; IPR022339; PTHR14093:SF3 (PANTHER)  |
| 2194 | DMPC15254245_Speleonectes_tulumensis_1 | trypsin 3  | 155 | 3.84E-28  | 63.90% | -   | 0  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER), SignalP-NN(euk) (SIGNALP)                             |
| 2195 | DMPC15254250_Speleonectes_tulumensis_0 | 26s proteasome non-atpase regulatory subunit 10  | 135 | 7.75E-42  | 67.10% | P:biological_process  | 1  | IPR002110; IPR020683; PTHR24199 (PANTHER), PTHR24199:SF0 (PANTHER)   |
| 2196 | DMPC15254329_Speleonectes_tulumensis_0 | ---NA---   | 225 |           |        | -   | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2197 | DMPC15254361_Speleonectes_tulumensis_1 | aldehyde mitochondrial                           | 301 | 5.90E-126 | 85.40% | F:catalytic activity; P:metabolic process   | 2  | IPR015590; IPR016160; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 2198 | DMPC15254374_Speleonectes_tulumensis_2 | heat shock related 70kda protein (hsp 70 family) | 166 | 3.05E-38  | 61.70% | F:ATP binding; F:nucleotide binding; P:response to stress; C:cytoplasm  | 4  | IPR013126; G3DSA:3.30.30.30 (GENE3D), G3DSA:3.30.420.40 (GENE3D), PTHR19375 (PANTHER), PTHR19375:SF1 (PANTHER), SSF53067 (SUPERFAMILY) |
| 2199 | DMPC15254375_Speleonectes_tulumensis_0 | 26s proteasome non-atpase regulatory subunit 10  | 123 | 8.22E-36  | 69.90% | P:metabolic process; P:regulation of biological process; P:cell cycle; C:protein complex; C:intracellular; P:signal transduction; P:cell death; P:mitochondrion organization; C:cytoskeleton; ; F:protein binding; P:cellular protein modification process; P:response to stress; C:cytoplasm; P:cell growth; P:cellular component organization; P:protein metabolic process; P:catabolic process; P:protein transport; C:nucleus | 20 | IPR002110; IPR020683; PTHR24199 (PANTHER), PTHR24199:SF0 (PANTHER)   |
| 2200 | DMPC15254391_Speleonectes_tulumensis_0 | peptidyl-prolyl cis-trans isomerase-like 3-like  | 257 | 3.17E-46  | 62.50% | F:peptidyl-prolyl cis-trans isomerase activity; P:protein folding; P:protein peptidyl-prolyl isomerization; F:isomerase activity  | 4  | IPR002130; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER)   |



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|------|--|---|-----|----------|--------|--|----|--|
| 2201 | DMPC15254409_Speleonectes tulumensis_1 | soma ferritin   | 112 | 7.98E-29 | 88.80% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process  | 5  | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2202 | DMPC15254461_Speleonectes tulumensis_1 | collagen and calcium binding egf domains 1                  | 208 | 4.73E-65 | 63.50% | F:binding  | 1  | IPR000742; IPR001881; IPR013032; G3DSA:2.10.25.10 (GENE3D), PTHR24023 (PANTHER), PTHR24023:SF13 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF57196 (SUPERFAMILY) |
| 2203 | DMPC15254503_Speleonectes tulumensis_2 | glucan pattern-recognition lipoprotein                      | 574 | 1.45E-31 | 41.75% | P:lipid transport; F:lipid transporter activity  | 2  | IPR020292  |
| 2204 | DMPC15254595_Speleonectes tulumensis_2 | armet-like protein  | 161 | 2.01E-37 | 79.30% | -  | 0  | IPR011001; IPR019345; PTHR12990 (PANTHER), PTHR12990:SF2 (PANTHER), tmhmm (TMHMM)  |
| 2205 | DMPC15254634_Speleonectes tulumensis_1 | short-chain dehydrogenase reductase                         | 97  | 9.64E-16 | 79.30% | F:catalytic activity; P:metabolic process; F:nucleotide binding  | 3  | IPR002198; IPR016040; PTHR24322 (PANTHER), PTHR24322:SF0 (PANTHER), tmhmm (TMHMM), SSF51735 (SUPERFAMILY)  |
| 2206 | DMPC15254663_Speleonectes tulumensis_2 | chitinase partial   | 74  | 2.71E-23 | 67.00% | -  | 0  | IPR001223; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), PTHR11177:SF31 (PANTHER), SSF54556 (SUPERFAMILY)  |
| 2207 | DMPC15254666_Speleonectes tulumensis_2 | hypothetical protein DAPPUDRAFT_248374                      | 155 | 8.98E-28 | 82.80% | F:calcium ion binding  | 1  | PTHR19237 (PANTHER)  |
| 2208 | DMPC15254789_Speleonectes tulumensis_2 | protein wnt-8b  | 174 | 2.10E-58 | 68.50% | P:anatomical structure morphogenesis; P:embryo development; P:regulation of biological process; ; P:signal transduction; P:multicellular organismal development  | 6  | IPR005817; IPR013301; IPR018161  |
| 2209 | DMPC15254790_Speleonectes tulumensis_2 | ame: full=annexin-b12 xii ame: full=annexin-12              | 236 | 3.67E-15 | 78.30% | F:binding  | 1  | IPR001464; IPR018252; IPR018502  |
| 2210 | DMPC15254805_Speleonectes tulumensis_1 | carboxypeptidase d-like                                     | 149 | 7.23E-47 | 75.20% | -  | 0  | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11532 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                                 |
| 2211 | DMPC15254862_Speleonectes tulumensis_4 | n-acetylglucosamine-1-phosphotransferase subunit gamma-like | 91  | 4.51E-16 | 64.80% | F:transferase activity; C:Golgi apparatus; C:extracellular region  | 3  | IPR009011; PTHR12630 (PANTHER), PF13015 (PFAM), SignalP-NN(euk) (SIGNALP)  |
| 2212 | DMPC15254892_Speleonectes tulumensis_0 | hemagglutinin amebocyte aggregation factor-like             | 113 | 1.19E-11 | 63.50% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2213 | DMPC15254984_Speleonectes tulumensis_0 | anti-lipopolysaccharide factor                              | 152 | 1.79E-29 | 68.50% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2214 | DMPC15254992_Speleonectes tulumensis_0 | chymotrypsin a  | 129 | 1.13E-08 | 73.75% | F:peptidase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2215 | DMPC15254994_Speleonectes tulumensis_4 | pacifastin-related peptide precursor                        | 131 | 1.02E-16 | 49.90% | F:peptidase inhibitor activity; P:negative regulation of peptidase activity  | 2  | IPR006552; IPR008037; IPR016307; IPR020862   |
| 2216 | DMPC15255062_Speleonectes tulumensis_2 | ---NA---  | 100 |          |        | -  | 0  | IPR000716; IPR022339; PTHR14093:SF6 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2217 | DMPC15255167_Speleonectes tulumensis_1 | prophenoloxidase subunit 2                                  | 292 | 2.45E-22 | 72.10% | P:biosynthetic process; ; P:secondary metabolic process; P:response to stress; F:catalytic activity; C:extracellular region  | 6  | IPR005203; IPR013788; IPR014756; PTHR11511:SF4 (PANTHER)   |
| 2218 | DMPC15255169_Speleonectes tulumensis_2 | serine protease hepsin                                      | 139 | 2.27E-09 | 55.40% | F:peptidase activity; P:cellular component organization; P:anatomical structure morphogenesis; P:embryo development; P:response to external stimulus; P:response to abiotic stimulus; C:plasma membrane; F:ion channel activity; P:metabolic process; P:regulation of biological process; C:cell | 11 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                                    |

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|------|--|---|-----|----------|--------|--|----|--|
| 2219 | DMPC15255247_Speleonectes_tulumensis_1 | chymotrypsin-like protease ctrl- partial          | 155 | 5.66E-18 | 57.60% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM) |
| 2220 | DMPC15255285_Speleonectes_tulumensis_0 | myosin heavy chain                                | 124 | 6.04E-38 | 89.00% | -  | 0  | IPR002928; PTHR13140 (PANTHER), PTHR13140:SF106 (PANTHER)  |
| 2221 | DMPC15255293_Speleonectes_tulumensis_0 | dermatopontin 3                                   | 102 | 2.97E-08 | 60.50% | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2222 | DMPC15255305_Speleonectes_tulumensis_1 | selenium-dependent glutathione peroxidase         | 108 | 4.03E-27 | 78.30% | -  | 0  | IPR000889; IPR012336   |
| 2223 | DMPC15255400_Speleonectes_tulumensis_1 | hemocyanin subunit type 1 precursor               | 144 | 4.96E-46 | 67.90% | -  | 0  | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2224 | DMPC15255417_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor        | 106 | 5.01E-08 | 57.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2225 | DMPC15255534_Speleonectes_tulumensis_2 | ame: full=trypsin-1 ame: full=trypsin i           | 128 | 1.81E-22 | 78.40% | -  | 0  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 2226 | DMPC15255627_Speleonectes_tulumensis_0 | maltase- intestinal-like                          | 179 | 6.85E-50 | 67.00% | -  | 0  | IPR000322; IPR017853; SSF51011 (SUPERFAMILY)   |
| 2227 | DMPC15255667_Speleonectes_tulumensis_1 | 60s ribosomal protein l40                         | 149 | 4.84E-42 | 98.70% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)                   |
| 2228 | DMPC15255685_Speleonectes_tulumensis_1 | gelsolin-like allergen der f 16                   | 231 | 2.22E-51 | 66.60% | F:actin binding; P:cytoskeleton organization   | 2  | IPR007122; IPR007123; G3DSA:3.40.20.10 (GENE3D), SSF55753 (SUPERFAMILY)  |
| 2229 | DMPC15255746_Speleonectes_tulumensis_1 | alpha-aminoadipic semialdehyde dehydrogenase-like | 371 | 0        | 84.80% | F:catalytic activity; P:metabolic process; F:nucleotide binding  | 3  | IPR015590; IPR016160; IPR016161; IPR016162; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF26 (PANTHER), tmhmm (TMHMM)                  |
| 2230 | DMPC15255822_Speleonectes_tulumensis_1 | proclotting enzyme                                | 346 | 1.76E-30 | 59.10% | F:hydrolase activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24272 (PANTHER), SignalP-NN(euk) (SIGNALP)                |
| 2231 | DMPC15255883_Speleonectes_tulumensis_2 | allergen 5  | 137 | 2.24E-19 | 56.70% | -  | 0  | IPR001283; IPR014044; SignalP-NN(euk) (SIGNALP)  |
| 2232 | DMPC15255887_Speleonectes_tulumensis_1 | dipeptidyl peptidase 9                            | 171 | 4.65E-78 | 85.80% | F:peptidase activity; C:cell; P:protein metabolic process; P:catabolic process   | 4  | IPR001375; G3DSA:3.40.50.1820 (GENE3D), PTHR11731 (PANTHER), PTHR11731:SF9 (PANTHER), SSF53474 (SUPERFAMILY)                         |
| 2233 | DMPC15255935_Speleonectes_tulumensis_2 | hemocyanin subunit type 2 precursor               | 141 | 8.08E-32 | 73.80% | -  | 0  | IPR005203; IPR013788; IPR014756  |
| 2234 | DMPC15256044_Speleonectes_tulumensis_2 | calponin homology domain- chdc lrch               | 85  | 7.61E-21 | 76.80% | F:hydrolase activity   | 1  | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR23155 (PANTHER), PTHR23155:SF10 (PANTHER), SSF52058 (SUPERFAMILY)               |
| 2235 | DMPC15256085_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor   | 144 | 7.65E-20 | 50.70% | F:peptidase inhibitor activity; P:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity  | 4  | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

|      |  |  |     |          |        |  |   |   |
|------|--|--|-----|----------|--------|--|---|---|
| 2236 | DMPC15256110_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_57749                                      | 169 | 1.46E-40 | 77.50% | F:peptidase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF33 (PANTHER), tmhmm (TMHMM)   |
| 2237 | DMPC15256113_Speleonectes_tulumensis_0 | serine protease  | 193 | 6.02E-08 | 42.60% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2238 | DMPC15256314_Speleonectes_tulumensis_2 | serine proteinase stubble-like   | 238 | 4.67E-74 | 67.30% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity  | 3 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF33 (PANTHER)   |
| 2239 | DMPC15256357_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_308200                                     | 180 | 8.09E-12 | 46.30% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP)  |
| 2240 | DMPC15256439_Speleonectes_tulumensis_0 | allergen 5   | 161 | 3.45E-17 | 69.30% | -  | 0 | IPR001283; IPR002413; IPR014044   |
| 2241 | DMPC15256549_Speleonectes_tulumensis_2 | glycosyl-phosphatidylinositol-linked carbonic anhydrase                    | 131 | 1.10E-15 | 54.00% | -  | 0 | IPR001148; IPR023561  |
| 2242 | DMPC15256564_Speleonectes_tulumensis_1 | neutral ceramidase-like  | 128 | 7.05E-25 | 71.00% | -  | 0 | IPR006823; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2243 | DMPC15256596_Speleonectes_tulumensis_2 | phosphoglucose isomerase   | 140 | 5.97E-37 | 94.30% | P:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; C:cytoplasm; F:catalytic activity; P:biosynthetic process   | 6 | IPR001672; IPR018189; IPR023096; G3DSA:3.40.50.10490 (GENE3D), PTHR11469:SF0 (PANTHER), SSF53697 (SUPERFAMILY)  |
| 2244 | DMPC15256597_Speleonectes_tulumensis_2 | low affinity immunoglobulin epsilon fc receptor                            | 302 | 5.75E-19 | 52.60% | P:positive regulation of killing of cells of other organism; F:carbohydrate binding; P:positive regulation of humoral immune response mediated by circulating immunoglobulin; P:positive regulation of nitric-oxide synthase biosynthetic process; P:positive regulation of nitric-oxide synthase activity; C:external side of plasma membrane | 6 | IPR001304; IPR016186; IPR016187; IPR018378; PTHR22802 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2245 | DMPC15256655_Speleonectes_tulumensis_0 | chymotrypsin-like elastase family member 2a-like                           | 174 | 7.83E-11 | 59.80% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2246 | DMPC15256680_Speleonectes_tulumensis_2 | serine protease  | 126 | 2.57E-27 | 59.40% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity; F:peptidase activity  | 4 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), PTHR24260:SF33 (PANTHER)   |
| 2247 | DMPC15256690_Speleonectes_tulumensis_2 | trypsin 7  | 135 | 4.09E-20 | 74.60% | F:hydrolase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)   |
| 2248 | DMPC15256696_Speleonectes_tulumensis_1 | leucine-rich repeat and calponin homology domain-containing protein 1-like | 213 | 1.05E-72 | 68.20% | F:hydrolase activity   | 1 | IPR001611; IPR003591; G3DSA:3.80.10.10 (GENE3D), PTHR23155 (PANTHER), PTHR23155:SF10 (PANTHER), PF13504 (PFAM), SM00364 (SMART), SSF52058 (SUPERFAMILY) |
| 2249 | DMPC15256710_Speleonectes_tulumensis_2 | lim and sh3 domain protein lasp-like                                       | 197 | 3.74E-27 | 86.20% | F:binding  | 1 | IPR001452; G3DSA:2.30.30.40 (GENE3D), PTHR11039 (PANTHER)   |
| 2250 | DMPC15256819_Speleonectes_tulumensis_1 | dermatopontin 2  | 331 | 2.30E-37 | 59.20% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2251 | DMPC15256863_Speleonectes_tulumensis_2 | serine protease 82 precursor   | 115 | 2.17E-16 | 59.50% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |
| 2252 | DMPC15256868_Speleonectes_tulumensis_2 | neurogenic locus notch protein   | 119 | 1.92E-47 | 78.90% | F:enzyme regulator activity  | 1 | IPR000152; IPR000742; IPR001881; IPR013032; IPR018097; G3DSA:2.10.25.10 (GENE3D), PTHR24047 (PANTHER), PTHR24047:SF0 (PANTHER), SSF57196 (SUPERFAMILY)  |
| 2253 | DMPC15256935_Speleonectes_tulumensis_0 | hypothetical protein DAPPUDRAFT_308200                                     | 151 | 1.03E-08 | 50.25% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |

|      |  |  |     |           |         |   |   |   |
|------|--|--|-----|-----------|---------|---|---|---|
| 2254 | DMPC15256957_Speleonectes_tulumensis_1 | mitochondrial manganese superoxide dismutase   | 121 | 2.21E-18  | 85.50%  | -   | 0 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)  |
| 2255 | DMPC15256998_Speleonectes_tulumensis_2 | ame: full=plasminogen contains: ame: full=plasmin heavy chain a contains: ame: full=activation peptide contains: ame: full=plasmin heavy chain short form contains: ame: full=plasmin light chain b flags: precursor | 106 | 2.82E-09  | 73.10%  | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER)  |
| 2256 | DMPC15257007_Speleonectes_tulumensis_1 | ---NA---   | 110 |           |         | -   | 0 | <a href="#">IPR008197</a> ; <a href="#">PTHR19441</a> (PANTHER), <a href="#">SignalP-NN(euk) (SIGNALP)</a>  |
| 2257 | DMPC15257126_Speleonectes_tulumensis_0 | techlectin-5b isoform  | 225 | 6.79E-55  | 65.70%  | -   | 0 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)   |
| 2258 | DMPC15257137_Speleonectes_tulumensis_2 | hemocyanin 2   | 149 | 1.06E-21  | 85.60%  | -   | 0 | IPR000896; IPR008922; IPR013788; PTHR11511:SF20 (PANTHER), tmhmm (TMHMM)  |
| 2259 | DMPC15257225_Speleonectes_tulumensis_0 | guanine nucleotide-binding protein subunit beta-like   | 315 | 5.68E-134 | 94.20%  | F:receptor activity; F:kinase activity; P:metabolic process                                       | 3 | <a href="#">IPR001680</a> ; <a href="#">IPR015943</a> ; <a href="#">IPR017986</a> ; <a href="#">IPR019775</a> ; <a href="#">IPR020472</a> ; <a href="#">PTHR19868</a> (PANTHER), <a href="#">PTHR19868:SF0</a> (PANTHER), <a href="#">SignalP-NN(euk) (SIGNALP)</a>   |
| 2260 | DMPC15257411_Speleonectes_tulumensis_2 | serine threonine-protein kinase mos  | 131 | 4.01E-18  | 57.20%  | F:kinase activity   | 1 | IPR000719; IPR008271; IPR011009; G3DSA:1.10.510.10 (GENE3D), PTHR23257 (PANTHER)  |
| 2261 | DMPC15257460_Speleonectes_tulumensis_0 | heavy polypeptide 1  | 117 | 2.64E-22  | 89.20%  | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process     | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 2262 | DMPC15257519_Speleonectes_tulumensis_1 | gastric mucin  | 277 | 8.65E-18  | 43.90%  | P:cell adhesion   | 1 | IPR001007; IPR006207; PTHR11339 (PANTHER), PTHR11339:SF25 (PANTHER)   |
| 2263 | DMPC15257529_Speleonectes_tulumensis_0 | cathepsin 1  | 176 | 8.21E-40  | 75.10%  | F:peptidase activity; P:protein metabolic process; P:catabolic process                            | 3 | <a href="#">IPR000668</a> ; <a href="#">IPR013128</a> ; <a href="#">IPR025660</a> ; <a href="#">IPR025661</a> ; <a href="#">G3DSA:3.90.70.10</a> (GENE3D), <a href="#">PTHR12411:SF149</a> (PANTHER), <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm</a> (TMHMM), <a href="#">SSF54001</a> (SUPERFAMILY) |
| 2264 | DMPC15257613_Speleonectes_tulumensis_1 | kazal-type protease inhibitor  | 126 | 4.08E-16  | 51.70%  | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 2265 | DMPC15257683_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor  | 191 | 1.09E-103 | 70.40%  | -   | 0 | IPR005203; IPR013788; IPR014756   |
| 2266 | DMPC15257695_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase   | 133 | 1.67E-31  | 85.50%  | F:nucleotide binding; P:carbohydrate metabolic process; F:catalytic activity; P:metabolic process | 4 | <a href="#">IPR016040</a> ; <a href="#">IPR020828</a> ; <a href="#">IPR020831</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">SSF51735</a> (SUPERFAMILY)  |
| 2267 | DMPC15257723_Speleonectes_tulumensis_0 | aldehyde dehydrogenase mitochondrial-like  | 154 | 1.01E-54  | 85.00%  | F:catalytic activity; P:metabolic process   | 2 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 2268 | DMPC15257812_Speleonectes_tulumensis_2 | tpa_exp: ubiquitin   | 121 | 1.53E-78  | 100.00% | -   | 0 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY)  |
| 2269 | DMPC15257835_Speleonectes_tulumensis_0 | boophilin-like protein   | 120 | 2.90E-09  | 58.30%  | F:hydrolase activity  | 1 | IPR002223; IPR020901; PTHR10083 (PANTHER)   |
| 2270 | DMPC15257863_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like  | 136 | 1.29E-12  | 63.00%  | -   | 0 | <a href="#">IPR026645</a> ; <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm</a> (TMHMM)   |
| 2271 | DMPC15257890_Speleonectes_tulumensis_0 | ankyrin repeat and socs box protein 13-like  | 177 | 4.49E-30  | 68.60%  | F:protein binding   | 1 | IPR002110; IPR020683; PTHR24196 (PANTHER), PTHR24196:SF3 (PANTHER)  |
| 2272 | DMPC15257974_Speleonectes_tulumensis_2 | cathepsin 1  | 152 | 5.61E-71  | 78.10%  | -   | 0 | IPR000668; IPR013128; IPR025660; IPR025661; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 2273 | DMPC15257996_Speleonectes_tulumensis_2 | chymotrypsinogen b-like  | 128 | 1.46E-15  | 53.50%  | -   | 0 | <a href="#">IPR001254</a> ; <a href="#">IPR009003</a> ; <a href="#">G3DSA:2.40.10.10</a> (GENE3D), <a href="#">PTHR24275</a> (PANTHER), <a href="#">SignalP-NN(euk) (SIGNALP)</a> , <a href="#">tmhmm</a> (TMHMM)   |

|      |  |   |     |          |        |  |   |   |
|------|--|---|-----|----------|--------|--|---|---|
| 2274 | DMPC15258022_Speleonectes_tulumensis_1 | carboxypeptidase b-like                   | 208 | 2.21E-49 | 68.30% | P:proteolysis; F:metallocarboxypeptidase activity; F:carboxypeptidase activity; F:zinc ion binding | 4 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                          |
| 2275 | DMPC15258027_Speleonectes_tulumensis_0 | chitinase partial                         | 285 | 1.08E-58 | 67.20% | -  | 0 | IPR001223; IPR002557; IPR013781; IPR017853; G3DSA:3.10.50.10 (GENE3D), PTHR11177 (PANTHER), SSF54556 (SUPERFAMILY)                                    |
| 2276 | DMPC15258133_Speleonectes_tulumensis_0 | trypsin                                   | 144 | 2.97E-22 | 66.70% | -  | 0 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)   |
| 2277 | DMPC15258154_Speleonectes_tulumensis_1 | trypsin 3                                 | 227 | 4.04E-31 | 51.50% | -  | 0 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                                 |
| 2278 | DMPC15258162_Speleonectes_tulumensis_1 | lipase 3-like                             | 118 | 7.08E-30 | 71.50% | F:hydrolase activity; P:lipid metabolic process  | 2 | G3DSA:3.40.50.1820 (GENE3D), PTHR11005 (PANTHER), PTHR11005:SF0 (PANTHER), SSF53474 (SUPERFAMILY)   |
| 2279 | DMPC15258219_Speleonectes_tulumensis_2 | lysozyme precursor                        | 180 | 1.97E-45 | 64.80% | F:lysozyme activity; P:cell wall macromolecule catabolic process                                   | 2 | IPR000974; IPR001916; IPR019799; IPR023346; G3DSA:1.10.530.10 (GENE3D), PTHR11407 (PANTHER)   |
| 2280 | DMPC15258291_Speleonectes_tulumensis_1 | GF20025                                   | 138 | 8.36E-08 | 68.00% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 2281 | DMPC15258299_Speleonectes_tulumensis_2 | ---NA---                                  | 140 |          |        | -  | 0 | IPR001283; IPR014044  |
| 2282 | DMPC15258487_Speleonectes_tulumensis_0 | pdz domain-containing protein 11          | 72  | 2.13E-09 | 73.80% | F:protein binding; C:cytosol; C:plasma membrane  | 3 | PTHR14063 (PANTHER)   |
| 2283 | DMPC15258580_Speleonectes_tulumensis_0 | cathepsin 1                               | 128 | 1.32E-25 | 67.20% | -  | 0 | IPR000668; IPR013128; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 2284 | DMPC15258587_Speleonectes_tulumensis_2 | kazal-type protease inhibitor             | 249 | 2.30E-24 | 51.40% | -  | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)  |
| 2285 | DMPC15258601_Speleonectes_tulumensis_0 | ferritin gfl                              | 102 | 4.63E-25 | 86.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process      | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 2286 | DMPC15258620_Speleonectes_tulumensis_2 | hemocyanin subunit type 1 precursor       | 150 | 1.38E-62 | 68.00% | -  | 0 | IPR005204; IPR013788; PTHR11511:SF23 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2287 | DMPC15258631_Speleonectes_tulumensis_2 | Trypsin-1                                 | 107 | 8.54E-07 | 56.00% | -  | 0 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2288 | DMPC15258664_Speleonectes_tulumensis_1 | ame: full=trypsin-1 ame: full=trypsin i   | 184 | 3.36E-20 | 75.10% | -  | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24256 (PANTHER)  |
| 2289 | DMPC15258704_Speleonectes_tulumensis_2 | serine protease                           | 150 | 4.75E-22 | 57.90% | F:peptidase activity   | 1 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2290 | DMPC15258732_Speleonectes_tulumensis_1 | soma ferritin                             | 98  | 7.40E-23 | 87.40% | -  | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 2291 | DMPC15258810_Speleonectes_tulumensis_1 | hypothetical protein DAPPUDRAFT_315125    | 161 | 4.69E-09 | 50.00% | -  | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2292 | DMPC15258864_Speleonectes_tulumensis_2 | aldehyde dehydrogenase mitochondrial-like | 210 | 1.43E-69 | 83.00% | F:catalytic activity; P:metabolic process  | 2 | IPR015590; IPR016161; IPR016163; PTHR11699 (PANTHER), PTHR11699:SF46 (PANTHER)  |
| 2293 | DMPC15258914_Speleonectes_tulumensis_2 | female neotenic-specific protein 3        | 155 | 2.67E-11 | 53.67% | -  | 0 | no IPS match  |
| 2294 | DMPC15258940_Speleonectes_tulumensis_1 | soma ferritin                             | 122 | 5.43E-24 | 88.00% | -  | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347   |
| 2295 | DMPC15259028_Speleonectes_tulumensis_1 | cytosolic non-specific dipeptidase-like   | 111 | 1.72E-28 | 75.30% | P:metabolic process; F:peptidase activity  | 2 | G3DSA:3.40.630.10 (GENE3D), PTHR11014 (PANTHER), PTHR11014:SF15 (PANTHER), SSF53187 (SUPERFAMILY)   |

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|------|--|--|-----|----------|--------|---|---|--|
| 2296 | DMPC15259044_Speleonectes_tulumensis_1 | cathepsin 1  | 142 | 7.84E-14 | 62.80% | -   | 0 | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                     |
| 2297 | DMPC15259105_Speleonectes_tulumensis_0 | hyaluronan-binding protein 2-like                                    | 96  | 3.79E-12 | 55.60% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2298 | DMPC15259127_Speleonectes_tulumensis_2 | trypsinogen 3  | 122 | 5.47E-13 | 44.80% | -   | 0 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2299 | DMPC15259237_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor                                  | 125 | 2.17E-21 | 75.20% | -   | 0 | IPR005203; IPR013788; IPR014756  |
| 2300 | DMPC15259324_Speleonectes_tulumensis_4 | hemocyanin subunit type 1 precursor                                  | 150 | 1.12E-59 | 67.80% | -   | 0 | IPR005204; IPR013788; PTHR11511:SF20 (PANTHER)   |
| 2301 | DMPC15259358_Speleonectes_tulumensis_1 | ---NA---   | 101 |          |        | -   | 0 | IPR013785; IPR017853; IPR018155; SignalP-NN(euk) (SIGNALP)   |
| 2302 | DMPC15259374_Speleonectes_tulumensis_1 | cathepsin 1-like   | 185 | 1.59E-19 | 86.90% | F:peptidase activity; P:protein metabolic process; P:catabolic process                        | 3 | IPR000668; IPR013128; IPR025661; G3DSA:2.40.50.170 (GENE3D), PTHR12411:SF149 (PANTHER), tmhmm (TMHMM), SSF54001 (SUPERFAMILY)                                    |
| 2303 | DMPC15259391_Speleonectes_tulumensis_1 | retinol dehydrogenase 10-b-like                                      | 87  | 3.94E-09 | 75.60% | -   | 0 | PTHR24316 (PANTHER), PTHR24316:SF1 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2304 | DMPC15259424_Speleonectes_tulumensis_0 | subfamily member 9   | 158 | 7.90E-43 | 81.20% | P:protein metabolic process; F:protein binding  | 2 | IPR001623; IPR018253; PTHR24078 (PANTHER), PTHR24078:SF16 (PANTHER)  |
| 2305 | DMPC15259429_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like                      | 134 | 3.62E-11 | 60.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2306 | DMPC15259441_Speleonectes_tulumensis_0 | hemocyanin subunit type 1 precursor                                  | 96  | 2.70E-25 | 73.40% | -   | 0 | IPR005203; IPR013788; IPR014756; PTHR11511:SF18 (PANTHER)  |
| 2307 | DMPC15259461_Speleonectes_tulumensis_2 | serine protease p127   | 323 | 1.04E-26 | 55.80% | F:catalytic activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER)  |
| 2308 | DMPC15259510_Speleonectes_tulumensis_1 | ame: full=hyaluronidase short=hya ame: full=hyaluronoglucosaminidase | 164 | 6.59E-27 | 60.50% | F:catalytic activity  | 1 | IPR013785; IPR017853; IPR018155  |
| 2309 | DMPC15259513_Speleonectes_tulumensis_1 | mitochondrial manganese superoxide dismutase                         | 108 | 1.95E-26 | 87.70% | F:binding; P:metabolic process; F:catalytic activity  | 3 | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 2310 | DMPC15259530_Speleonectes_tulumensis_2 | ferritin h subunit   | 91  | 3.54E-20 | 92.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2311 | DMPC15259534_Speleonectes_tulumensis_2 | transcriptional repressor ctcfl-like                                 | 135 | 1.06E-82 | 95.10% | F:binding; C:intracellular; F:DNA binding   | 3 | IPR007087; IPR013087; IPR015880; PTHR24375 (PANTHER), PTHR24375:SF1 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)  |
| 2312 | DMPC15259620_Speleonectes_tulumensis_1 | protein shifted-like isoform 2                                       | 118 | 9.44E-49 | 85.10% | -   | 0 | IPR003306  |
| 2313 | DMPC15259732_Speleonectes_tulumensis_0 | dermatopontin 3  | 98  | 2.07E-09 | 68.50% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2314 | DMPC15259738_Speleonectes_tulumensis_2 | mantle protein 9   | 148 | 1.36E-08 | 67.75% | -   | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |
| 2315 | DMPC15259797_Speleonectes_tulumensis_1 | peptidase s8 s53 subtilisin kexin sedolisin                          | 148 | 1.37E-13 | 58.80% | F:hydrolase activity  | 1 | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 2316 | DMPC15259923_Speleonectes_tulumensis_0 | linear gramicidin synthetase subunit d                               | 121 | 2.24E-51 | 80.70% | F:binding; F:catalytic activity; P:metabolic process; F:nucleotide binding                    | 4 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24322 (PANTHER), SSF51735 (SUPERFAMILY)  |
| 2317 | DMPC15259970_Speleonectes_tulumensis_0 | trypsin-like serine proteinase 1                                     | 90  | 1.43E-09 | 67.60% | F:peptidase activity  | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2318 | DMPC15259995_Speleonectes_tulumensis_0 | dysferlin-interacting protein 1                                      | 150 | 3.72E-49 | 69.80% | P:negative regulation of phosphatase activity; F:phosphatase binding                          | 2 | IPR002110; IPR020683; PTHR24179 (PANTHER), PTHR24179:SF2 (PANTHER)   |

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|------|--|---|-----|----------|--------|--|----|---|
| 2319 | DMPC15260028_Speleonectes_tulumensis_0 | equistatin precursor  | 107 | 6.76E-08 | 65.57% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities  | 4  | IPR000716; IPR022339; tmhmm (TMHMM)   |
| 2320 | DMPC15260242_Speleonectes_tulumensis_0 | ame: full=venom allergen 5<br>short=ag5 ame: full=cysteine-rich venom protein short=crvp ame: allergen=ves vi 5 | 111 | 5.82E-10 | 63.20% | -  | 0  | IPR002413; IPR014044; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2321 | DMPC15260263_Speleonectes_tulumensis_0 | upf0764 protein c16orf89 homolog  | 250 | 5.34E-09 | 62.78% | -  | 0  | no IPS match  |
| 2322 | DMPC15260371_Speleonectes_tulumensis_0 | low density lipoprotein receptor-1  | 137 | 7.78E-18 | 61.00% | C:integral to membrane; C:membrane; P:lipid metabolic process; P:lipid transport; P:endocytosis; P:transport; C:low-density lipoprotein particle; F:receptor activity; P:cholesterol metabolic process; P:steroid metabolic process; F:calcium ion binding; C:coated pit | 12 | IPR002172; PR00261 (PRINTS), PTHR10529 (PANTHER), tmhmm (TMHMM)   |
| 2323 | DMPC15260470_Speleonectes_tulumensis_1 | hemocyanin subunit 6  | 145 | 3.40E-23 | 67.60% | -  | 0  | IPR005203; IPR013788; IPR014756; PTHR11511:SF4 (PANTHER)  |
| 2324 | DMPC15260549_Speleonectes_tulumensis_1 | anti-lipopolysaccharide factor isoform 7  | 264 | 1.34E-19 | 72.00% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)   |
| 2325 | DMPC15260651_Speleonectes_tulumensis_1 | serine protease   | 120 | 1.70E-23 | 74.70% | F:peptidase activity   | 1  | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER)                                |
| 2326 | DMPC15260658_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor   | 147 | 2.46E-20 | 50.30% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activities  | 4  | IPR000716; PTHR12036 (PANTHER), PTHR12036:SF5 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                             |
| 2327 | DMPC15260736_Speleonectes_tulumensis_2 | dermatopontin 3   | 106 | 3.04E-08 | 57.38% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2328 | DMPC15260842_Speleonectes_tulumensis_0 | trypsin   | 150 | 1.58E-59 | 76.70% | F:catalytic activity   | 1  | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER)           |
| 2329 | DMPC15260922_Speleonectes_tulumensis_2 | chymotrypsin a  | 147 | 1.06E-23 | 65.20% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER)   |
| 2330 | DMPC15261051_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor   | 138 | 2.53E-12 | 55.10% | P:proteolysis; F:peptidase activity  | 2  | IPR000716; PTHR12352 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2331 | DMPC15261136_Speleonectes_tulumensis_3 | protein isoform a   | 123 | 5.13E-08 | 74.14% | P:embryo development   | 1  | IPR002172; IPR023415; PTHR12106 (PANTHER), PTHR12106:SF7 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                  |
| 2332 | DMPC15261152_Speleonectes_tulumensis_1 | isoform a   | 175 | 9.70E-26 | 60.00% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF28 (PANTHER)                     |
| 2333 | DMPC15261154_Speleonectes_tulumensis_1 | chymotrypsin a  | 152 | 1.19E-23 | 65.20% | F:peptidase activity   | 1  | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24275 (PANTHER), tmhmm (TMHMM)                                |
| 2334 | DMPC15261258_Speleonectes_tulumensis_0 | dermatopontin 2   | 110 | 7.05E-09 | 58.30% | -  | 0  | SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2335 | DMPC15261373_Speleonectes_tulumensis_1 | ribosomal protein ubq l40e  | 139 | 1.22E-84 | 98.40% | C:cytoskeleton; C:protein complex; F:structural molecule activity; C:lipid particle; P:cellular protein modification process; P:protein metabolic process; P:catabolic process; C:ribosome; C:cytosol; P:translation   | 10 | IPR000626; IPR001975; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |

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| 2336 | DMPC15261449_Speleonectes_tulumensis_0 | epidermal growth factor receptor                                 | 146 | 2.88E-42 | 88.60% | F:protein kinase activity; F:receptor activity; P:cellular protein modification process; F:nucleotide binding; C:cell; P:signal transduction        | 6 | IPR000719; IPR001245; IPR008266; IPR011009; IPR020635; G3DSA:1.10.510.10 (GENE3D), PTHR24416 (PANTHER), PTHR24416:SF95 (PANTHER)                                 |
| 2337 | DMPC15261587_Speleonectes_tulumensis_0 | mhc class ii antigen-associated invariant chain                  | 87  | 3.49E-11 | 63.60% | P:proteolysis; F:peptidase activity   | 2 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP)  |
| 2338 | DMPC15261608_Speleonectes_tulumensis_2 | kazal-type serine proteinase inhibitor 4                         | 137 | 2.37E-13 | 66.00% | -   | 0 | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR25189 (PANTHER), PTHR25189:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY)            |
| 2339 | DMPC15261615_Speleonectes_tulumensis_0 | ame: full=saxiphilin short=sax flags: precursor                  | 140 | 1.58E-21 | 52.60% | F:peptidase inhibitor activity; F:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2340 | DMPC15261654_Speleonectes_tulumensis_2 | ankyrin repeat and kh domain-containing protein 1                | 322 | 0        | 92.70% | -   | 0 | IPR002110; IPR020683; PTHR24139 (PANTHER), PTHR24139:SF7 (PANTHER)   |
| 2341 | DMPC15261690_Speleonectes_tulumensis_0 | lysosomal acid phosphatase                                       | 197 | 3.38E-59 | 68.90% | F:acid phosphatase activity   | 1 | IPR000560; G3DSA:3.40.50.1240 (GENE3D), PTHR11567 (PANTHER), PTHR11567:SF26 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF53254 (SUPERFAMILY)                         |
| 2342 | DMPC15261706_Speleonectes_tulumensis_2 | cathepsin 1  | 143 | 1.62E-35 | 84.70% | F:peptidase activity; P:protein metabolic process; P:catabolic process  | 3 | IPR000668; IPR013128; IPR025660; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SSF54001 (SUPERFAMILY)  |
| 2343 | DMPC15261726_Speleonectes_tulumensis_0 | apolipoprotein d-like isoform 2                                  | 102 | 4.89E-13 | 68.10% | F:lipid binding; P:transport; F:transporter activity  | 3 | IPR011038; IPR012674; IPR022272; PTHR10612 (PANTHER), PTHR10612:SF4 (PANTHER), SignalP-NN(euk) (SIGNALP)   |
| 2344 | DMPC15261778_Speleonectes_tulumensis_1 | salivary fat body serine carboxypeptidase                        | 209 | 7.12E-33 | 63.90% | F:hydrolase activity  | 1 | IPR001563; G3DSA:3.40.50.1820 (GENE3D), SSF53474 (SUPERFAMILY)   |
| 2345 | DMPC15261798_Speleonectes_tulumensis_1 | cbpa1_drops ame: full=zinc carboxypeptidase a 1 flags: precursor | 129 | 8.02E-27 | 67.40% | C:extracellular region; F:peptidase activity  | 2 | IPR000834; G3DSA:3.40.630.10 (GENE3D), PTHR11705 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF53187 (SUPERFAMILY)                                     |
| 2346 | DMPC15261900_Speleonectes_tulumensis_0 | armet-like protein   | 128 | 3.03E-29 | 77.60% | -   | 0 | IPR011001; IPR019345; PTHR12990 (PANTHER), PTHR12990:SF2 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2347 | DMPC15261973_Speleonectes_tulumensis_0 | ---NA---   | 140 |          |        | -   | 0 | SignalP-NN(euk) (SIGNALP)  |
| 2348 | DMPC15262033_Speleonectes_tulumensis_1 | soma ferritin  | 113 | 9.46E-33 | 88.60% | P:cellular homeostasis; F:catalytic activity; F:binding; P:ion transport; P:metabolic process   | 5 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2349 | DMPC15262039_Speleonectes_tulumensis_1 | thioredoxin peroxidase   | 255 | 3.68E-73 | 88.00% | -   | 0 | IPR000866; IPR012336; IPR019479; PTHR10681 (PANTHER), PTHR10681:SF44 (PANTHER)   |
| 2350 | DMPC15262235_Speleonectes_tulumensis_0 | hemocyanin subunit type 2 precursor                              | 161 | 5.99E-16 | 83.00% | -   | 0 | IPR005203; IPR013788; IPR014756; tmhmm (TMHMM)   |
| 2351 | DMPC15262292_Speleonectes_tulumensis_2 | serine protease inhibitor kazal-type 6-like                      | 157 | 1.39E-08 | 67.00% | -   | 0 | IPR001239; IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21312 (PANTHER), PTHR21312:SF8 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF100895 (SUPERFAMILY) |



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|------|--|--|-----|----------|--------|--|----|--|
| 2352 | DMPC15262378_Speleonectes_tulumensis_1 | 60s ribosomal protein l40  | 143 | 2.00E-42 | 97.80% | P:cell cycle; P:signal transduction; F:structural molecule activity; P:biological_process; P:response to stress; P:DNA metabolic process; P:reproduction; P:viral reproduction; C:cytosol; C:nucleoplasm; P:protein metabolic process; P:catabolic process; P:regulation of biological process; P:cell death; F:protein binding; C:plasma membrane; ; C:endosome; P:cellular component organization; C:ribosome; C:cytoplasmic membrane-bounded vesicle; P:nucleobase-containing compound metabolic process; P:cellular protein modification process; P:translation; P:transport | 25 | IPR000626; IPR019954; IPR019955; IPR019956; G3DSA:3.10.20.90 (GENE3D), PTHR10666 (PANTHER), SSF54236 (SUPERFAMILY) |
| 2353 | DMPC15262423_Speleonectes_tulumensis_0 | ame: full= cytoplasmic ame: full=actin-depolymerizing factor short=adf | 119 | 6.12E-22 | 72.00% | F:actin binding; P:response to abscisic acid stimulus; P:cytoskeleton organization   | 3  | IPR007122; IPR007123; G3DSA:3.40.20.10 (GENE3D), SignalP-NN(euk) (SIGNALP), SSF55753 (SUPERFAMILY)                 |
| 2354 | DMPC15262533_Speleonectes_tulumensis_0 | kazal-type protease inhibitor  | 128 | 8.09E-15 | 53.20% | -  | 0  | IPR002350; G3DSA:3.30.60.30 (GENE3D), PTHR21131 (PANTHER), SSF100895 (SUPERFAMILY)                                 |
| 2355 | DMPC15262546_Speleonectes_tulumensis_0 | superoxide dismutase soluble   | 127 | 3.51E-11 | 74.80% | P:metabolic process; F:catalytic activity; F:antioxidant activity  | 3  | IPR001424; IPR024134; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2356 | DMPC15262633_Speleonectes_tulumensis_1 | ensangp00000031746-like protein  | 259 | 1.06E-94 | 92.20% | P:protein metabolic process; P:cellular protein modification process; F:catalytic activity   | 3  | IPR002130; IPR020892; G3DSA:2.40.100.10 (GENE3D), PTHR11071 (PANTHER), PTHR11071:SF41 (PANTHER)                    |
| 2357 | DMPC15262640_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like                        | 134 | 2.06E-22 | 61.70% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)   |
| 2358 | DMPC15262646_Speleonectes_tulumensis_0 | extracellular cyanophycinase   | 382 | 4.09E-73 | 49.10% | -  | 0  | IPR005320; G3DSA:3.40.50.880 (GENE3D), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF52317 (SUPERFAMILY)            |
| 2359 | DMPC15262650_Speleonectes_tulumensis_1 | ---NA---   | 152 | -        | -      | -  | 0  | no IPS match   |
| 2360 | DMPC15262656_Speleonectes_tulumensis_2 | thioredoxin 1  | 96  | 9.64E-18 | 81.80% | P:cellular homeostasis; P:regulation of biological process; F:electron carrier activity; F:catalytic activity; P:metabolic process; F:phospholipase A2 activity; F:calcium ion binding; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region  | 5  | IPR005746; IPR012336; IPR013766; IPR017937; PTHR10438:SF17 (PANTHER), SignalP-NN(euk) (SIGNALP)                    |
| 2361 | DMPC15262678_Speleonectes_tulumensis_1 | phospholipase a2-like  | 146 | 4.68E-16 | 62.80% | F:peptidase activity   | 5  | IPR001211; IPR013090; IPR016090; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2362 | DMPC15262786_Speleonectes_tulumensis_2 | alkaline serine protease   | 153 | 8.08E-13 | 65.80% | -  | 1  | IPR007280; SignalP-NN(euk) (SIGNALP)   |
| 2363 | DMPC15262800_Speleonectes_tulumensis_0 | hemagglutinin amebocyte aggregation factor                             | 190 | 5.48E-37 | 57.40% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2364 | DMPC15262855_Speleonectes_tulumensis_1 | mitochondrial manganese superoxide dismutase                           | 104 | 1.85E-25 | 84.60% | F:binding; P:metabolic process; F:catalytic activity   | 3  | IPR001189; IPR019831; G3DSA:1.10.287.990 (GENE3D), PTHR11404:SF5 (PANTHER)   |
| 2365 | DMPC15262872_Speleonectes_tulumensis_2 | hemocyanin subunit type 1  | 147 | 6.53E-71 | 75.70% | -  | 0  | IPR005203; IPR013788; IPR014756  |
| 2366 | DMPC15262923_Speleonectes_tulumensis_0 | anti-lipopolysaccharide factor   | 128 | 1.98E-19 | 61.50% | -  | 0  | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP)  |
| 2367 | DMPC15262928_Speleonectes_tulumensis_2 | ---NA---   | 157 | -        | -      | -  | 0  | IPR007233; SignalP-NN(euk) (SIGNALP)   |
| 2368 | DMPC15262988_Speleonectes_tulumensis_0 | group 10 secretory phospholipase a2                                    | 215 | 9.39E-08 | 49.57% | F:phospholipase A2 activity; F:calcium ion binding; F:hydrolase activity; P:lipid catabolic process; P:phospholipid metabolic process; C:extracellular region  | 6  | IPR001211; IPR013090; IPR016090; PTHR11716:SF2 (PANTHER)   |
| 2369 | DMPC15263032_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor                             | 139 | 1.86E-13 | 57.00% | -  | 0  | IPR026645; SignalP-NN(euk) (SIGNALP)   |

|      |  |   |     |          |        |   |   |  |
|------|--|---|-----|----------|--------|---|---|--|
| 2370 | DMPC15263049_Speleonectes_tulumensis_2 | anti-lipopolysaccharide factor                  | 142 | 6.33E-31 | 68.10% | -   | 0 | IPR024509; IPR024716; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2371 | DMPC15263172_Speleonectes_tulumensis_1 | ame: full= heavy subunit short=ferritin h       | 122 | 4.79E-41 | 77.20% | -   | 0 | IPR001519; IPR008331; IPR009040; IPR009078; IPR012347  |
| 2372 | DMPC15263241_Speleonectes_tulumensis_2 | ace-paralogous acetylcholinesterase             | 155 | 2.44E-45 | 74.90% | F:hydrolase activity  | 1 | IPR002018; G3DSA:3.40.50.1820 (GENE3D), PTHR11559 (PANTHER), PTHR11559:SF33 (PANTHER), SSF53474 (SUPERFAMILY)                                |
| 2373 | DMPC15263264_Speleonectes_tulumensis_1 | plasminogen activator spa                       | 123 | 3.24E-20 | 60.30% | F:peptidase activity  | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER)  |
| 2374 | DMPC15263282_Speleonectes_tulumensis_1 | ---NA---  | 104 |          |        | -   | 0 | IPR013128; IPR013201; G3DSA:3.90.70.10 (GENE3D), PTHR12411:SF149 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM), SSF54001 (SUPERFAMILY) |
| 2375 | DMPC15263332_Speleonectes_tulumensis_1 | epididymal secretory protein e1                 | 119 | 6.68E-16 | 59.50% | P:transport   | 1 | IPR003172; IPR014756; PTHR11306 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2376 | DMPC15263457_Speleonectes_tulumensis_2 | unnamed protein product                         | 148 | 3.23E-07 | 61.00% | -   | 0 | IPR001506; IPR024079; PTHR24543 (PANTHER), PTHR24543:SF85 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF55486 (SUPERFAMILY)                       |
| 2377 | DMPC15263470_Speleonectes_tulumensis_1 | ame: full=techlectin-5a flags: precursor        | 273 | 4.08E-47 | 60.40% | F:receptor binding; C:extracellular space; P:signal transduction  | 3 | IPR002181; IPR014715; IPR014716; IPR020837; PTHR19143 (PANTHER)  |
| 2378 | DMPC15263476_Speleonectes_tulumensis_2 | isoform g                                       | 452 | 2.73E-26 | 60.50% | F:structural molecule activity; F:hydrolase activity; P:cellular component organization; C:cytoplasm  | 5 | IPR002223; IPR020901; PTHR10083 (PANTHER), tmhmm (TMHMM)   |
| 2379 | DMPC15263514_Speleonectes_tulumensis_1 | glyceraldehyde-3-phosphate dehydrogenase        | 138 | 9.86E-35 | 90.30% | F:carbohydrate metabolic process; P:generation of precursor metabolites and energy; P:catabolic process; F:catalytic activity; P:metabolic process  | 7 | IPR020829; IPR020831; G3DSA:3.30.360.10 (GENE3D), SSF55347 (SUPERFAMILY)   |
| 2380 | DMPC15263533_Speleonectes_tulumensis_2 | hypothetical protein DAPPUDRAFT_308200          | 153 | 2.82E-08 | 52.00% | -   | 0 | IPR020234; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2381 | DMPC15263538_Speleonectes_tulumensis_1 | dermatopontin 2                                 | 148 | 2.75E-09 | 59.40% | -   | 0 | IPR026645; tmhmm (TMHMM)   |
| 2382 | DMPC15263596_Speleonectes_tulumensis_0 | trypsinogens 1                                  | 136 | 2.96E-18 | 56.70% | F:hydrolase activity  | 1 | IPR001254; IPR001314; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                                   |
| 2383 | DMPC15263605_Speleonectes_tulumensis_0 | mannosyl-oligosaccharide -alpha-mannosidase ib  | 104 | 2.31E-26 | 78.80% | F:hydrolase activity; F:calcium ion binding; C:cell   | 3 | IPR001382; PTHR11742:SF10 (PANTHER)  |
| 2384 | DMPC15263659_Speleonectes_tulumensis_2 | thioredoxin peroxidase                          | 130 | 3.89E-23 | 59.30% | P:oxidation-reduction process; F:oxidoreductase activity; F:antioxidant activity; F:peroxiredoxin activity; F:peroxidase activity                   | 5 | IPR000866; IPR012336; PTHR10681 (PANTHER), PTHR10681:SF51 (PANTHER)  |
| 2385 | DMPC15263697_Speleonectes_tulumensis_1 | ame: full=saxiphilin short=sax flags: precursor | 128 | 1.53E-18 | 51.50% | F:peptidase inhibitor activity; P:serine-type endopeptidase inhibitor activity; C:extracellular region; P:negative regulation of peptidase activity | 4 | IPR000716; IPR022339; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2386 | DMPC15263754_Speleonectes_tulumensis_0 | zinc metalloproteinase nas-8                    | 113 | 1.54E-12 | 57.80% | F:hydrolase activity  | 1 | IPR001506; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)  |
| 2387 | DMPC15263757_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor-like | 116 | 2.71E-12 | 63.30% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2388 | DMPC15263818_Speleonectes_tulumensis_1 | fatty acid binding protein                      | 171 | 5.43E-48 | 79.20% | P:transport; F:lipid binding; F:transporter activity  | 3 | IPR000463; IPR000566; IPR011038; IPR012674; PTHR11955 (PANTHER)  |
| 2389 | DMPC15263820_Speleonectes_tulumensis_2 | hemagglutinin amebocyte aggregation factor      | 137 | 1.93E-13 | 60.00% | -   | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)  |
| 2390 | DMPC15263824_Speleonectes_tulumensis_1 | growth differentiation factor 8                 | 172 | 7.42E-25 | 57.70% | F:growth factor activity; P:growth; C:extracellular region  | 3 | IPR001111; IPR015615; PTHR11848:SF15 (PANTHER)   |

|      |  |   |     |          |        |  |   |   |
|------|--|---|-----|----------|--------|--|---|---|
| 2391 | DMPC15263860_Speleonectes_tulumensis_2 | factor d-like protein                           | 340 | 5.44E-74 | 61.10% | P:proteolysis; F:serine-type endopeptidase activity; F:catalytic activity; F:peptidase activity  | 4 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24268 (PANTHER), PTHR24268:SF68 (PANTHER)                        |
| 2392 | DMPC15263939_Speleonectes_tulumensis_1 | serine protease 82 precursor                    | 115 | 2.81E-16 | 59.80% | F:hydrolase activity   | 1 | IPR001254; IPR001314; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24265 (PANTHER), SignalP-NN(euk) (SIGNALP)                       |
| 2393 | DMPC15263965_Speleonectes_tulumensis_1 | projectin short variant                         | 274 | 5.81E-94 | 72.30% | -  | 0 | IPR003598; IPR003599; IPR007110; IPR013098; IPR013783; SSF48726 (SUPERFAMILY)   |
| 2394 | DMPC15264029_Speleonectes_tulumensis_1 | zinc c2h2 type family protein                   | 117 | 3.37E-15 | 60.70% | F:nucleic acid binding; F:zinc ion binding; C:intracellular; P:biological_process  | 4 | IPR007087; IPR013087; IPR015880; PTHR11389 (PANTHER), PTHR11389:SF381 (PANTHER), PF13465 (PFAM), SSF57667 (SUPERFAMILY)                     |
| 2395 | DMPC15264050_Speleonectes_tulumensis_1 | hypothetical protein BRAFLDRAFT_120123          | 96  | 1.60E-07 | 66.00% | F:peptidase activity   | 1 | IPR002172; IPR023415; PTHR10529 (PANTHER), SignalP-NN(euk) (SIGNALP)  |
| 2396 | DMPC15264085_Speleonectes_tulumensis_1 | hemagglutinin amebocyte aggregation factor-like | 108 | 3.90E-09 | 60.90% | -  | 0 | IPR026645; SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)   |
| 2397 | DMPC15264186_Speleonectes_tulumensis_0 | trypsin partial                                 | 165 | 1.78E-15 | 60.70% | F:hydrolase activity   | 1 | IPR001254; IPR009003; G3DSA:2.40.10.10 (GENE3D), PTHR24264 (PANTHER), PTHR24264:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)     |
| 2398 | DMPC15264249_Speleonectes_tulumensis_2 | zinc metalloproteinase nas-4-like isoform 1     | 118 | 6.48E-13 | 56.20% | F:metal ion binding; P:proteolysis; F:metallopeptidase activity; F:hydrolase activity; F:zinc ion binding; F:peptidase activity; F:metalloendopeptidase activity | 7 | IPR001506; IPR024079; PTHR10127 (PANTHER), SSF55486 (SUPERFAMILY)   |
| 2399 | DMPC15264257_Speleonectes_tulumensis_0 | plasminogen activator spa                       | 132 | 1.59E-22 | 60.80% | F:peptidase activity   | 1 | IPR001254; IPR009003; IPR018114; G3DSA:2.40.10.10 (GENE3D), PTHR24260 (PANTHER), SignalP-NN(euk) (SIGNALP), tmhmm (TMHMM)                   |
| 2400 | DMPC15264362_Speleonectes_tulumensis_0 | 3-oxoacyl-acyl-carrier-protein reductase-like   | 232 | 1.28E-50 | 83.40% | F:catalytic activity; P:metabolic process; F:nucleotide binding  | 3 | IPR002198; IPR002347; IPR016040; IPR020904; PTHR24322 (PANTHER), PTHR24322:SF0 (PANTHER), SignalP-NN(euk) (SIGNALP), SSF51735 (SUPERFAMILY) |