

Additional file 2. Protein spots, with statistically different relative abundances ($P < 0.05$), identified in gilthead seabream (*Sparus aurata*) blood plasma proteome from NET and HYP trials, by MALDI-TOF/TOF MS after separation by 2D-DIGE. List is given in ascending order of spot number.

| Spot no ^a | Accession no. ^b | Protein ID ^c | Protein Score ^d | Total Ion Score ^e | Mw (kDa) ^f | | pI ^g | | PC ^h | p-value ⁱ | q-value ^j | | FC ^k | |
|--|----------------------------|---|----------------------------|------------------------------|-----------------------|--------|-----------------|-----|-----------------|----------------------|----------------------|-----------------|-----------------|--------------|
| | | | | | T | O | T | O | | | T1 | T2 | T1 | T2 |
| Differential protein spots identified in the NET trial | | | | | | | | | | | | | | |
| 52 | AEA41139.1 | transferrin [<i>Sparus aurata</i>] | 212 | 181 | 74.28 | 113.97 | 5.93 | 5.9 | 12 | 1.40E-02 | 6.76E-01 | 1.35E-02 | 0.32 | 0.85 |
| 144 | AKA66306.1 | complement factor B-like protein, partial [<i>Siniperca chuatsi</i>] | 308 | 274 | 77.13 | 95.81 | 5.57 | 5 | 5 | 1.11E-02 | 1.83E-01 | 8.34E-03 | 1.06 | 1.78 |
| 146 | XP_008277007.1 | PREDICTED: complement factor B-like [<i>Stegastes partitus</i>] | 327 | 306 | 84.98 | 93.56 | 5.61 | 5 | 10 | 3.84E-03 | 9.72E-02 | 2.81E-03 | 1.59 | 2.38 |
| 152 | XP_008277007.1 | PREDICTED: complement factor B-like [<i>Stegastes partitus</i>] | 331 | 317 | 84.98 | 93.56 | 5.61 | 5 | 8 | 3.49E-04 | 2.88E-02 | 2.39E-04 | 1.72 | 2.54 |
| 202 | XP_019111370.1 | PREDICTED: inter-alpha-trypsin inhibitor heavy chain H3-like [<i>Larimichthys crocea</i>] | 309 | 286 | 102.46 | 89.21 | 5.44 | 4.5 | 13 | 1.64E-04 | 3.36E-01 | 1.58E-04 | -0.36 | -1.61 |
| | XP_010753395.2 | PREDICTED: antithrombin-III [<i>Larimichthys crocea</i>] | 197 | 153 | 51.04 | | 5.21 | | 13 | | | | | |
| 206 | XP_019111370.1 | PREDICTED: inter-alpha-trypsin inhibitor heavy chain H3-like [<i>Larimichthys crocea</i>] | 353 | 331 | 102.46 | 89.21 | 5.44 | 4.5 | 11 | 2.66E-03 | 5.71E-01 | 2.63E-03 | -0.26 | -1.66 |
| 209 | XP_019111370.1 | PREDICTED: inter-alpha-trypsin inhibitor heavy chain H3-like [<i>Larimichthys crocea</i>] | 334 | 295 | 102.46 | 89.21 | 5.44 | 4.6 | 9 | 2.45E-04 | 2.14E-01 | 2.01E-04 | -0.49 | -1.76 |
| 210 | KKF19329.1 | Inter-alpha-trypsin inhibitor heavy chain H3, partial [<i>Larimichthys crocea</i>] | 363 | 341 | 87.84 | 89.21 | 5.31 | 4.6 | 14 | 6.21E-03 | 2.61E-01 | 4.66E-03 | -0.39 | -0.94 |
| 224 | XP_017260893.1 | alpha-2-macroglobulin, partial [<i>Kryptolebias marmoratus</i>] | 91 | 91 | 40.18 | 85.07 | 5.21 | 5.4 | 1 | 7.01E-05 | 4.10E-02 | 4.74E-05 | -0.62 | -1.74 |
| 229 | XP_017260893.1 | alpha-2-macroglobulin, partial [<i>Kryptolebias marmoratus</i>] | 115 | 102 | 40.18 | 85.07 | 5.21 | 5.4 | 1 | 1.78E-04 | 9.29E-02 | 1.28E-04 | -0.46 | -1.40 |
| 301 | AWP20152.1 | putative apolipoprotein B-100-like isoform 2 [<i>Scophthalmus maximus</i>] | 186 | 303 | 422.92 | 75.52 | 4.99 | 5.1 | 27 | 2.45E-03 | 1.71E-02 | 2.56E-03 | -0.65 | -0.90 |
| 316 | AWP20152.1 | putative apolipoprotein B-100-like isoform 2 [<i>Scophthalmus maximus</i>] | 219 | 219 | 422.92 | 75.52 | 4.99 | 5.2 | 25 | 1.39E-02 | 1.23E-01 | 1.13E-02 | -0.88 | -1.46 |

| | | | | | | | | | | | | | | |
|-----|----------------|---|-----|-----|--------|-------|------|-----|----|----------|----------|-----------------|-------------|-------------|
| 326 | XP_019111370.1 | PREDICTED: inter-alpha-trypsin inhibitor heavy chain H3-like [Larimichthys crocea] | 129 | 116 | 102.46 | 77.34 | 5.44 | 4.7 | 10 | 1.11E-02 | 8.39E-01 | 3.99E-02 | -0.10 | 0.50 |
| 327 | XP_023284462.1 | antihemorrhagic factor cHLP-B-like [Seriola lalandi dorsalis] | 350 | 367 | 56.45 | | 5.97 | | 10 | | | | | |
| | AEA41139.1 | transferrin [Sparus aurata] | 738 | 645 | 74.28 | 75.52 | 5.93 | 5.7 | 24 | 7.85E-03 | 1.00E-01 | 6.12E-03 | -0.17 | -0.29 |
| 328 | XP_020489366.1 | fetuin-B-like [Labrus bergylta] | 276 | 246 | 55.36 | 77.34 | 6.04 | 4.5 | 6 | 2.11E-02 | 9.54E-01 | 2.88E-02 | 0.11 | 0.55 |
| 329 | XP_020506421.1 | hemopexin-like [Labrus bergylta] | 194 | 185 | 49.06 | 77.34 | 5.48 | 4.8 | 6 | 2.35E-02 | 4.15E-01 | 1.86E-02 | 0.34 | 0.88 |
| 332 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 216 | 178 | 46.70 | 77.34 | 5.61 | 4.6 | 6 | 2.19E-03 | 1.00E+00 | 5.01E-03 | 0.06 | 0.78 |
| 355 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 294 | 259 | 46.70 | 72.01 | 5.61 | 5.3 | 6 | 4.81E-02 | 4.53E-01 | 3.88E-02 | -0.25 | -0.52 |
| 367 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 92 | 66 | 46.70 | 72.01 | 5.61 | 5.4 | 8 | 2.38E-04 | 2.70E-01 | 2.08E-04 | 1.17 | 2.78 |
| 385 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 137 | 96 | 46.70 | 70.32 | 5.61 | 5.1 | 11 | 7.17E-03 | 1.56E-01 | 5.30E-03 | -0.42 | -0.73 |
| 396 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 247 | 181 | 46.70 | 70.32 | 5.61 | 5.2 | 10 | 1.55E-03 | 6.70E-02 | 1.10E-03 | -0.53 | -0.91 |
| 411 | XP_023285742.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 325 | 263 | 46.70 | 70.32 | 5.61 | 5.3 | 12 | 2.13E-03 | 6.77E-02 | 1.54E-03 | -0.43 | -0.73 |
| 425 | AEA41139.1 | transferrin [Sparus aurata] | 741 | 675 | 74.28 | 67.05 | 5.93 | 5.6 | 18 | 1.49E-02 | 3.95E-01 | 1.18E-02 | 0.10 | 0.27 |
| 427 | AEA41139.1 | transferrin [Sparus aurata] | 544 | 491 | 74.28 | 67.05 | 5.93 | 5.7 | 15 | 2.47E-03 | 1.76E-01 | 1.79E-03 | 0.25 | 0.58 |
| 429 | AEA41139.1 | transferrin [Sparus aurata] | 297 | 243 | 74.28 | 67.05 | 5.93 | 6.1 | 9 | 3.54E-02 | 5.16E-01 | 2.92E-02 | 0.14 | 0.39 |
| 438 | XP_004544273.1 | serine protease inhibitor A3K [Maylandia zebra] | 108 | 97 | 45.19 | 65.47 | 6.01 | 4.6 | 5 | 4.19E-02 | 3.44E-01 | 3.33E-02 | -0.33 | -0.71 |
| 446 | AFO64912.1 | alpha-1-antitrypsin [Oplegnathus fasciatus] | 562 | 502 | 46.25 | 65.47 | 5.69 | 4.5 | 8 | 2.72E-03 | 4.61E-01 | 2.43E-03 | -0.19 | -0.77 |
| 451 | XP_006787579.1 | PREDICTED: beta-2-glycoprotein 1-like [Neolamprologus brichardi] | 149 | 114 | 40.18 | 67.05 | 8.70 | 5.9 | 6 | 1.96E-02 | 4.05E-01 | 1.55E-02 | 0.19 | 0.50 |
| 491 | AEA41139.1 | transferrin [Sparus aurata] | 297 | 242 | 74.28 | 62.43 | 5.93 | 6 | 9 | 3.75E-02 | 6.96E-01 | 3.44E-02 | 0.13 | 0.43 |
| 497 | AEA41139.1 | transferrin [Sparus aurata] | 703 | 626 | 74.28 | 62.43 | 5.93 | 5.9 | 18 | 5.99E-03 | 5.43E-02 | 5.16E-03 | 0.43 | 0.62 |
| 499 | AEA41139.1 | transferrin [Sparus aurata] | 265 | 235 | 74.28 | 60.96 | 5.93 | 5.5 | 15 | 3.94E-03 | 5.17E-01 | 3.61E-03 | 0.17 | 0.60 |
| 502 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 115 | 67 | 29.63 | 59.53 | 5.20 | 4.8 | 8 | 1.17E-03 | 4.30E-01 | 1.37E-02 | -0.28 | 1.00 |
| 521 | KKF22678.1 | Fibrinogen alpha chain [Larimichthys crocea] | 206 | 195 | 74.19 | 62.43 | 5.29 | 5.9 | 5 | 1.58E-02 | 9.80E-01 | 2.42E-02 | 0.20 | 1.52 |
| | XP_023279907.1 | fibrinogen alpha chain isoform X2 [Seriola lalandi dorsalis] | 172 | 172 | 78.02 | | 5.93 | | 3 | | | | | |

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|-----|----------------|---|-----|-----|--------|-------|------|-----|----|----------|-----------------|-----------------|-------------|--------------|
| 544 | KKF22678.1 | Fibrinogen alpha chain [Larimichthys crocea] | 146 | 133 | 74.19 | 58.13 | 5.29 | 5.5 | 4 | 7.82E-03 | 3.67E-01 | 6.18E-03 | 1.33 | 2.26 |
| 556 | XP_018550494.1 | PREDICTED: leucine-rich alpha- 2-glycoprotein-like [Lates calcarifer] | 274 | 256 | 37.60 | 58.13 | 5.89 | 4.3 | 4 | 2.70E-03 | 3.06E-01 | 2.13E-03 | 0.51 | 1.20 |
| 557 | XP_023812997.1 | nucleoside diphosphate kinase B [Oryzias latipes] | 327 | 301 | 16.98 | 58.13 | 6.89 | 4.4 | 7 | 1.43E-03 | 3.94E-01 | 1.26E-03 | 0.22 | 0.68 |
| 558 | AEA41139.1 | transferrin [Sparus aurata] | 124 | 103 | 74.28 | 56.76 | 5.93 | 5.6 | 11 | 2.34E-03 | 2.60E-01 | 1.79E-03 | -0.46 | -2.18 |
| 559 | XP_018550494.1 | PREDICTED: leucine-rich alpha- 2-glycoprotein-like [Lates calcarifer] | 457 | 415 | 37.60 | 58.13 | 5.89 | 4.4 | 11 | 1.18E-03 | 5.24E-01 | 1.19E-03 | 0.13 | 0.53 |
| | AFO64912.1 | alpha-1-antitrypsin [Oplegnathus fasciatus] | 72 | 121 | 46.25 | | 5.69 | | 6 | | | | | |
| | AFO64912.1 | alpha-1-antitrypsin [Oplegnathus fasciatus] | 260 | 243 | 46.25 | | 5.69 | | 5 | | | | | |
| 586 | XP_018550494.1 | PREDICTED: leucine-rich alpha- 2-glycoprotein-like [Lates calcarifer] | 205 | 184 | 37.60 | 54.12 | 5.89 | 4.4 | 5 | 7.00E-03 | 1.53E-02 | 1.30E-02 | 0.48 | 0.46 |
| 589 | AEA41139.1 | transferrin [Sparus aurata] | 669 | 600 | 74.28 | 56.76 | 5.93 | 5.8 | 21 | 5.49E-03 | 2.82E-01 | 4.17E-03 | -0.25 | -0.82 |
| 591 | ADM13620.1 | complement component c3 [Sparus aurata] | 337 | 326 | 185.32 | 55.43 | 8.08 | 4.9 | 12 | 1.42E-02 | 2.88E-01 | 1.08E-02 | -0.46 | -1.22 |
| 593 | ADM13620.1 | complement component c3 [Sparus aurata] | 603 | 551 | 185.32 | 55.43 | 8.08 | 5.1 | 22 | 7.23E-03 | 4.42E-01 | 6.02E-03 | 1.00 | 2.13 |
| 595 | ADM13620.1 | complement component c3 [Sparus aurata] | 667 | 606 | 185.32 | 55.43 | 8.08 | 5.2 | 31 | 2.79E-03 | 1.93E-01 | 2.04E-03 | 1.08 | 2.06 |
| 600 | XP_020506421.1 | hemopexin-like [Labrus bergylta] warm temperature acclimation protein 65-2 [Lateolabrax japonicus] | 222 | 253 | 49.06 | 54.12 | 5.48 | 4.4 | 6 | 1.47E-04 | 4.61E-03 | 1.19E-04 | 0.53 | 0.81 |
| 604 | CCA29190.1 | alpha-1-antitrypsin [Oplegnathus fasciatus] | 147 | 118 | 48.73 | 55.43 | 5.22 | 4.3 | 13 | 1.95E-04 | 1.21E-02 | 1.39E-04 | 0.51 | 0.84 |
| | AFO64912.1 | putative apolipoprotein B-100- like isoform 2 [Scophthalmus maximus] | 93 | 93 | 46.25 | | 5.69 | | 2 | | | | | |
| 613 | AWP20152.1 | alpha-1-antitrypsin homolog [Seriola lalandi dorsalis] | 173 | 175 | 422.92 | 54.12 | 4.99 | 5.4 | 6 | 1.73E-02 | 2.06E-01 | 1.33E-02 | -0.30 | -0.59 |
| 621 | XP_023285742.1 | transferrin [Sparus aurata] | 134 | 84 | 46.70 | 52.85 | 5.61 | 4.6 | 10 | 2.79E-02 | 1.52E-01 | 2.42E-02 | -0.46 | -0.89 |
| 624 | AEA41139.1 | beta-actin, partial [Gobiocypris rarus] | 447 | 391 | 74.28 | 54.12 | 5.93 | 5.8 | 6 | 3.08E-02 | 5.99E-01 | 2.67E-02 | 0.10 | 0.34 |
| 632 | ABP35641.1 | transferrin [Sparus aurata] | 337 | 286 | 38.97 | 52.85 | 5.20 | 5.2 | 7 | 6.60E-04 | 2.11E-02 | 4.93E-04 | 0.98 | 1.65 |
| 654 | AEA41139.1 | haptoglobin [Sparus aurata] | 552 | 473 | 74.28 | 52.85 | 5.93 | 5.9 | 17 | 4.05E-02 | 3.03E-01 | 3.23E-02 | 0.19 | 0.39 |
| 663 | ARI46218.1 | PREDICTED: apolipoprotein B- 100-like [Paralichthys olivaceus] | 139 | 103 | 34.94 | 50.40 | 7.62 | 4.9 | 5 | 3.06E-04 | 2.51E-02 | 2.10E-04 | 0.65 | 1.09 |
| 677 | XP_019953039.1 | kininogen-1-like isoform X2 [Anabas testudineus] | 93 | 61 | 417.56 | 50.40 | 5.09 | 5 | 22 | 5.09E-06 | 1.57E-03 | 3.31E-06 | 1.42 | 2.32 |
| | XP_026202291.1 | | 82 | 70 | 48.45 | | 5.84 | | 3 | | | | | |

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|-----|----------------|---|------|-----|-------|-------|------|-----|----|----------|-----------------|-----------------|--------------|--------------|
| 682 | AEA41139.1 | transferrin [Sparus aurata] | 295 | 273 | 74.28 | 49.21 | 5.93 | 5.8 | 7 | 6.20E-03 | 1.64E-01 | 4.54E-03 | -0.39 | -0.70 |
| 708 | AEA41139.1 | transferrin [Sparus aurata] | 656 | 606 | 74.28 | 48.05 | 8.31 | 4.7 | 14 | 1.90E-03 | 3.57E-01 | 1.59E-03 | 0.15 | 0.46 |
| 710 | ARI46218.1 | haptoglobin [Sparus aurata] | 345 | 274 | 74.28 | 48.05 | 5.93 | 5.6 | 10 | 2.72E-05 | 2.04E-04 | 4.40E-05 | 1.39 | 1.53 |
| 715 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 327 | 219 | 34.94 | 46.92 | 7.62 | 5.2 | 17 | 3.64E-04 | 2.26E-02 | 2.55E-04 | 1.44 | 2.20 |
| 736 | AJW65884.1 | Hyaluronic acid binding protein 2 [Sparus aurata] | 261 | 271 | 69.16 | 44.74 | 5.68 | 4.7 | 11 | 2.18E-03 | 3.59E-01 | 1.81E-03 | -0.33 | -1.53 |
| 737 | XP_008277007.1 | PREDICTED: complement factor B-like [Stegastes partitus] | 128 | 122 | 29.63 | 46.92 | 5.20 | 4.4 | 2 | 5.79E-07 | 5.17E-01 | 1.04E-06 | -0.31 | -2.52 |
| 751 | AEA41139.1 | transferrin [Sparus aurata] | 282 | 256 | 74.28 | 43.69 | 5.61 | 4.9 | 5 | 6.24E-05 | 5.81E-01 | 8.46E-05 | -0.16 | -1.25 |
| 778 | AEA41139.1 | transferrin [Sparus aurata] | 318 | 275 | 74.28 | 42.66 | 5.93 | 5 | 6 | 3.94E-03 | 1.26E-01 | 2.85E-03 | -0.28 | -0.57 |
| 796 | ACN54269.1 | warm temperature acclimation-related 65 kDa protein [Sparus aurata] | 198 | 165 | 49.16 | 42.66 | 5.93 | 5.2 | 7 | 4.03E-06 | 1.20E-04 | 4.00E-06 | 0.85 | 1.13 |
| 833 | ACN54269.1 | warm temperature acclimation-related 65 kDa protein [Sparus aurata] | 175 | 159 | 49.16 | 39.72 | 5.41 | 5.2 | 9 | 4.06E-03 | 7.06E-02 | 3.10E-03 | -1.01 | -1.86 |
| 841 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 116 | 104 | 49.16 | 34.44 | 5.41 | 5.3 | 2 | 6.51E-06 | 5.06E-02 | 5.02E-06 | -0.48 | -1.40 |
| 843 | AEA41139.1 | transferrin [Sparus aurata] | 350 | 328 | 74.28 | 35.27 | 5.20 | 4.9 | 11 | 3.24E-03 | 7.08E-01 | 3.63E-03 | -0.21 | -1.96 |
| 864 | APO15792.1 | apolipoprotein Eb [Sparus aurata] | 613 | 511 | 74.28 | 35.27 | 5.93 | 6.2 | 17 | 1.47E-04 | 8.47E-01 | 2.59E-04 | 1.60 | 3.68 |
| 869 | APO15792.1 | apolipoprotein Eb [Sparus aurata] | 1070 | 851 | 30.99 | 35.27 | 4.81 | 4.7 | 24 | 1.93E-03 | 1.33E-01 | 1.37E-03 | 1.41 | 2.26 |
| 877 | BAM36361.1 | pentraxin [Oplegnathus fasciatus] | 183 | 177 | 25.59 | | 5.72 | | 4 | | | | | |
| | XP_022604055.1 | kininogen-1-like [Seriola dumerilii] | 114 | 179 | 39.99 | 32.84 | 5.00 | 5.1 | 3 | 1.65E-04 | 1.14E-04 | 1.39E-02 | -1.24 | -0.73 |
| 904 | AEA41139.1 | transferrin [Sparus aurata] | 430 | 411 | 74.28 | 29.86 | 5.93 | 5.6 | 9 | 3.09E-03 | 1.20E-01 | 2.21E-03 | -0.46 | -1.17 |
| 905 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; | 193 | 137 | 29.63 | 30.57 | 5.20 | 5.7 | 12 | 1.15E-03 | 5.45E-02 | 8.11E-04 | -1.46 | -2.63 |

| | | | | | | | | | | | | | | |
|-----|----------------|---|-----|-----|-------|-------|------|-----|----|----------|-----------------|-----------------|--------------|--------------|
| 907 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 356 | 263 | 29.64 | 31.57 | 5.20 | 5.7 | 16 | 1.27E-02 | 8.76E-01 | 4.07E-02 | 0.11 | -0.57 |
| 908 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 536 | 381 | 29.63 | 29.86 | 5.20 | 4.7 | 22 | 7.59E-05 | 3.00E-02 | 5.04E-05 | 1.27 | 2.31 |
| 919 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 477 | 297 | 29.63 | 29.86 | 5.20 | 4.4 | 22 | 1.01E-03 | 1.37E-01 | 7.19E-04 | -0.48 | -1.16 |
| 928 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 236 | 153 | 29.63 | 29.15 | 5.20 | 5.1 | 15 | 8.23E-04 | 3.85E-01 | 7.44E-04 | -0.23 | -0.81 |
| 932 | XP_023284462.1 | antihemorrhagic factor cHLP-B-like [Seriola lalandi dorsalis] RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 445 | 396 | 56.45 | 29.86 | 5.97 | 6.4 | 7 | 1.06E-02 | 1.57E-01 | 8.02E-03 | -0.48 | -0.82 |
| 937 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 226 | 179 | 29.63 | 28.47 | 5.20 | 4.9 | 10 | 1.04E-04 | 1.53E-01 | 8.34E-05 | -0.56 | -1.59 |
| 939 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 489 | 310 | 29.63 | 28.47 | 5.20 | 5.1 | 23 | 1.31E-05 | 1.39E-03 | 9.29E-06 | -1.06 | -1.68 |

| | | | | | | | | | | | | | | |
|-----|----------------|--|-----|-----|-------|-------|------|-----|----|----------|-----------------|-----------------|--------------|--------------|
| 950 | O42175.1 | Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 176 | 109 | 29.63 | 27.80 | 5.20 | 5.8 | 14 | 7.67E-04 | 1.42E-02 | 6.37E-04 | 0.48 | 0.73 |
| 954 | XP_008297163.1 | PREDICTED: hemopexin-like [Stegastes partitus] | 95 | 95 | 48.51 | | 5.39 | | 2 | | | | | |
| 959 | XP_014909301.1 | PREDICTED: hemopexin-like [Poecilia latipinna] | 246 | 205 | 47.86 | 27.80 | 5.33 | 5.5 | 10 | 3.76E-04 | 3.33E-04 | 6.64E-03 | -1.03 | -0.76 |
| 959 | XP_020489366.1 | fetuin-B-like [Labrus bergylta] | 154 | 123 | 55.36 | | 6.04 | | 9 | | 2.67E-02 | 8.05E-03 | | |
| 959 | XP_018541719.1 | PREDICTED: C-reactive protein-like [Lates calcarifer] | 132 | 117 | 25.24 | 27.80 | 5.20 | 6.4 | 7 | 6.70E-03 | | | -0.47 | -0.55 |
| 967 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 373 | 222 | 29.63 | 26.51 | 5.20 | 4.9 | 22 | 9.35E-04 | 1.78E-02 | 7.62E-04 | -1.57 | -3.09 |
| 970 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 234 | 120 | 29.63 | 25.88 | 5.20 | 5.1 | 18 | 1.59E-05 | 8.26E-02 | 1.27E-05 | -0.33 | -0.98 |
| 984 | XP_008297163.1 | PREDICTED: hemopexin-like [Stegastes partitus] | 223 | 164 | 48.51 | 24.68 | 5.39 | 5.4 | 6 | 3.15E-04 | 4.99E-01 | 3.43E-04 | -0.14 | -0.59 |
| 987 | XP_008297163.1 | PREDICTED: hemopexin-like [Stegastes partitus] | 180 | 131 | 48.51 | 25.27 | 5.39 | 5.9 | 8 | 1.48E-02 | 3.26E-01 | 1.13E-02 | 0.19 | 0.46 |
| 990 | APO15792.1 | apolipoprotein Eb [Sparus aurata] | 242 | 220 | 30.99 | | 4.81 | | 7 | | | | | |
| 990 | XP_010742296.3 | apolipoprotein A-I [Larimichthys crocea] | 86 | 78 | 28.82 | 24.68 | 4.62 | 4.7 | 3 | 4.95E-03 | 8.38E-01 | 1.96E-02 | 0.25 | -1.50 |
| 991 | AEA41139.1 | transferrin [Sparus aurata] | 583 | 406 | 74.28 | 24.68 | 5.93 | 5.4 | 14 | 1.60E-03 | 2.11E-01 | 1.20E-03 | 0.19 | 0.48 |
| 996 | APO15792.1 | apolipoprotein Eb [Sparus aurata] | 593 | 489 | 30.99 | | 4.81 | | 18 | | | | | |
| 996 | AWO96305.1 | putative apolipoprotein A-IV-like [Scophthalmus maximus] | 191 | 169 | 28.81 | 24.10 | 4.62 | 4.6 | 6 | 2.91E-05 | 6.55E-01 | 4.55E-05 | -0.10 | -3.04 |
| 997 | XP_010742296.3 | apolipoprotein A-I [Larimichthys crocea] | 134 | 103 | 28.82 | 24.10 | 4.62 | 4.5 | 7 | 1.20E-05 | 6.89E-02 | 9.41E-06 | -0.92 | -4.04 |

| | | | | | | | | | | | | | | |
|------|----------------|---|-----|-----|--------|-------|------|-----|----|----------|-----------------|-----------------|-------|--------------|
| 998 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 278 | 143 | 29.63 | 23.53 | 5.20 | 5.1 | 18 | 1.97E-04 | 2.72E-01 | 1.75E-04 | -0.29 | -0.99 |
| 1004 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 423 | 336 | 29.63 | 22.98 | 5.20 | 5 | 12 | 5.83E-05 | 1.28E-01 | 4.65E-05 | -0.34 | -1.10 |
| 1014 | XP_013872926.1 | PREDICTED: calcium/calmodulin-dependent protein kinase type II subunit delta-like [Austrofundulus limnaeus] | 168 | 223 | 41.19 | 22.98 | 6.84 | 5.2 | 7 | 8.52E-05 | 3.75E-03 | 6.58E-05 | -0.77 | -1.27 |
| 1016 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 350 | 265 | 29.63 | 22.44 | 5.20 | 5 | 13 | 4.96E-05 | 3.91E-02 | 3.37E-05 | -0.64 | -1.83 |
| 1021 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 305 | 262 | 29.63 | 22.44 | 5.20 | 5 | 7 | 1.14E-02 | 9.40E-01 | 3.09E-02 | 0.04 | -1.70 |
| 1048 | ADM13620.1 | complement component c3 [Sparus aurata] | 236 | 188 | 185.32 | 23.53 | 8.08 | 5.1 | 11 | 3.53E-04 | 2.79E-01 | 3.04E-04 | -0.50 | -1.84 |
| 1071 | XP_020489366.1 | fetuin-B-like [Labrus bergylta] | 283 | 253 | 55.36 | 19.00 | 6.04 | 4.8 | 9 | 1.66E-02 | 1.38E-01 | 1.34E-02 | -0.40 | -0.77 |
| 1072 | XP_020489366.1 | fetuin-B-like [Labrus bergylta] | 323 | 366 | 55.36 | 18.55 | 6.04 | 6.2 | 7 | 3.32E-03 | 1.42E-01 | 2.39E-03 | -0.47 | -1.07 |
| 1079 | AEA41139.1 | transferrin [Sparus aurata] | 220 | 209 | 74.28 | 19.00 | 5.93 | 5.8 | 10 | 1.90E-03 | 5.08E-02 | 1.41E-03 | -0.60 | -1.19 |
| 1083 | ADM13620.1 | complement component c3 [Sparus aurata] | 502 | 558 | 185.32 | 18.55 | 8.08 | 5 | 19 | 6.44E-03 | 8.01E-01 | 7.57E-03 | 0.97 | 2.28 |
| 1096 | XP_023284462.1 | antihemorrhagic factor cHLP-B-like [Seriola lalandi dorsalis] | 292 | 273 | 56.45 | 18.11 | 5.97 | 5.1 | 7 | 1.07E-02 | 2.08E-01 | 8.02E-03 | -0.35 | -0.72 |
| 1103 | AEA41139.1 | transferrin [Sparus aurata] | 502 | 466 | 74.28 | 18.11 | 5.93 | 5.2 | 10 | 3.70E-02 | 3.33E-01 | 2.92E-02 | 0.25 | 0.49 |
| 1144 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; | 202 | 158 | 29.63 | 15.70 | 5.20 | 4.8 | 10 | 4.86E-03 | 6.20E-02 | 3.90E-03 | 0.58 | 0.86 |

| | | | | | | | | | | | | | | |
|------|----------------|---|-----|-----|-------|-------|------|-----|----|----------|----------|-----------------|-------|--------------|
| 1151 | O42175.1 | l; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 489 | 408 | 29.63 | 15.70 | 5.20 | 4.9 | 14 | 2.77E-04 | 5.66E-02 | 1.88E-04 | -0.69 | -1.64 |
| 1157 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 136 | 119 | 29.63 | 15.33 | 5.20 | 5 | 3 | 2.79E-02 | 1.49E-01 | 2.43E-02 | 0.25 | 0.38 |
| | XP_017288315.2 | hemopexin-like [Kryptolebias marmoratus] RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 169 | 132 | 50.58 | | 5.97 | | 5 | | | | | |
| 1178 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 332 | 225 | 29.63 | 14.28 | 5.20 | 5.5 | 18 | 2.81E-03 | 2.58E-01 | 2.14E-03 | -0.31 | -0.76 |
| 1221 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 282 | 190 | 29.63 | 12.09 | 5.20 | 5.5 | 17 | 1.20E-03 | 2.32E-01 | 9.22E-04 | -0.42 | -1.14 |
| 1238 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein A1; Contains: RecName: Full=Proapolipoprotein A-I; Short=ProapoA-I; Flags: Precursor | 445 | 344 | 29.63 | 11.80 | 5.20 | 5.3 | 12 | 3.01E-04 | 5.16E-01 | 3.35E-04 | -0.25 | -1.19 |
| 1250 | O42175.1 | RecName: Full=Apolipoprotein A-I; Short=Apo-AI; Short=ApoA-I; AltName: Full=Apolipoprotein | 398 | 315 | 29.63 | 11.25 | 5.20 | 5.2 | 16 | 2.09E-04 | 1.30E-01 | 1.56E-04 | -0.37 | -1.00 |

A1; Contains: RecName:
Full=Proapolipoprotein A-I;
Short=ProapoA-I; Flags:
Precursor

Differential protein spots identified in the HYP trial

| | | | | | | | | | | | | | | |
|-----|------------|--|-----|-----|--------|-------|------|-----|----|----------|-----------------|-----------------|-------|-------|
| 130 | BAA95137.1 | myosin light chain 2 [Trachurus trachurus] | 734 | 640 | 19.03 | 82.11 | 4.68 | 5.1 | 11 | 1.38E-02 | 4.41E-02 | 1.67E-02 | -0.44 | -0.37 |
| 400 | ADM13620.1 | complement component c3 [Sparus aurata] | 326 | 302 | 185.32 | 47.31 | 8.08 | 4.5 | 22 | 4.82E-04 | 3.30E-04 | 4.04E-02 | -0.36 | -0.66 |

^a Spot no. – number of the spot in the 2D gel (Fig.3), attributed by the SameSpots software

^b Accession number – NCBI accession number

^c Protein ID – protein identification by MALDI-TOF/TOF MS

^d Protein Score – a non-probabilistic protein score obtained by Peptide mass fingerprinting (significance was given to > 76 , $P < 0.05$) and MS/MS search.

^e Total ion Score – sum of the individual ion scores given to the peptides matched to the protein in MS/MS (significance was given when the total ion score of a maximum of 3 peptides was > 60)

^f Theoretical and observed molecular weight (Mw) – theoretical Mw was obtained through the bioinformatic tool ProtParam (<https://web.expasy.org/protparam/>)

^g Theoretical and observed isoelectric point (pI) - theoretical pI was obtained through the bioinformatic tool ProtParam (<https://web.expasy.org/protparam/>)

^h PC – peptide count matched to entry

ⁱ *p-value* - *p-value* of the one-way ANOVA for the control/treated, $P < 0.05$

^j *q-value* - *q-value* of the post-hoc multiple comparison Tukey HSD test. Bold lettering indicates significant differences (95% confidence interval).

^k FC - Log₂(fold-change) - significant changes in protein abundance (treated/control): T1 – OC30, NET2 or HYP30, T2 – OC45, NET4 or HYP15. Bold lettering indicates significant fold-changes (> 1.0 and < -1.0).