

## **Supplemental Material to:**

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**In silico tissue-distribution of human Rho family  
GTPase activating proteins**

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**Table 1.** Nomenclature of human Rho family GAPs, with additional information

| Approved symbol (HGNC) | Approved full name (HGNC)         | Previous symbols and names (HGNC)                  | Protein length (amino acids) | Human chromosomal location | RefSeq transcript ID                        | Ensembl gene ID | Entrez gene ID (NCBI) | KIAA number | FLJ number                                       | Other symbols and aliases   |
|------------------------|-----------------------------------|--|------------------------------|----------------------------|---|-----------------|-----------------------|-------------|--|---|
| <b>ARHGAP1</b>         | Rho GTPase activating protein 1   | -  | 439                          | 11p11.2                    | NM_004308.2                                 | ENSG00000175220 | 392                   | -           | -  | Cdc42GAP, CDC42 GTPase-activating protein, CDC42GAP, p50rhoGAP, p50-RhoGAP, RHOGAP1, RhoGAP   |
| <b>ARHGAP4</b>         | Rho GTPase activating protein 4   | -  | 946                          | Xq28                       | NM_001164741.1, NM_001666.4                 | ENSG00000089820 | 393                   | KIAA0131    | -  | Rho-GAP hematopoietic protein C1, C1, p115, SrGAP4, RhoGAP4, RGC1   |
| <b>ARHGAP5</b>         | Rho GTPase activating protein 5   | growth factor independent 2, GFI2                  | 1502                         | 14q12                      | NM_001030055.1, NM_001173.2                 | ENSG00000100852 | 394                   | -           | -  | GFI2, p190-B, p190BRhoGAP, RhoGAP5,   |
| <b>ARHGAP6</b>         | Rho GTPase activating protein 6   | -  | 974                          | Xp22.3                     | NM_006125.2, NM_013423.2, NM_013427.2       | ENSG00000047648 | 395                   | -           | -  | RHOGAP6, rhoGAPX-1  |
| <b>ARHGAP8</b>         | Rho GTPase activating protein 8   | -  | 464                          | 22q13.3                    | NM_001017526.1, NM_181335.2                 | ENSG00000241484 | 23779                 | -           | FLJ20185   | BPGAP1, PP610   |
| <b>ARHGAP9</b>         | Rho GTPase activating protein 9   | -  | 750                          | 12q13.3                    | NM_001080156.1, NM_001080157.1, NM_032496.2 | ENSG00000123329 | 64333                 | -           | FLJ16525   | RGL1, 10C, MGC1295  |
| <b>ARHGAP10</b>        | Rho GTPase activating protein 10  | -  | 786                          | 4q31.23                    | NM_024605.3                                 | ENSG00000071205 | 79658                 | -           | FLJ20896, FLJ41791                               | GRAF2, Graf-related protein 2, PSGAP, GTPase regulator associated with focal adhesion kinase 2  |
| <b>ARHGAP11A</b>       | Rho GTPase activating protein 11A | -  | 1023                         | 15q13.3                    | NM_014783                                   | ENSG00000198826 | 9824                  | KIAA0013    | -  | MGC70740  |
| <b>ARHGAP11B</b>       | Rho GTPase activating protein 11B | FAM7B1, family with sequence similarity 7member B1 | 267                          | 15q13.2                    | NM_001039841                                | ENSG00000187951 | 89839                 | -           | -  | Rho-type GTPase-activating protein 11B, B'-T, GAP (1-8)   |
| <b>ARHGAP12</b>        | Rho GTPase activating protein 12  | -  | 846                          | 10p11.22                   | NM_018287.5                                 | ENSG00000165322 | 94134                 | -           | FLJ10971, FLJ20737, FLJ10971, FLJ45709, FLJ21785 | DKFZp779N2050   |
| <b>ARHGAP15</b>        | Rho GTPase activating protein 15  | -  | 475                          | 2q22.2-q22.3               | NM_018460.3                                 | ENSG00000075884 | 55843                 | -           | -  | BM-024, BM-046, BM-030, BM046   |
| <b>ARHGAP17</b>        | Rho GTPase activating protein 17  | -  | 881                          | 16p12.2-p12.1              | NM_001006634.1, NM_018054.4                 | ENSG00000140750 | 55114                 | -           | FLJ13219, FLJ37567, FLJ43368, FLJ10308           | NADRIN, DKFZp564A1363, RICH1, RhoGAP interacting with CIP4 homologs protein 1, MGC87805, MST066, MST110, MSTP038, PP367, PP367, PP4534, RICH1B, WBP15 |
| <b>ARHGAP18</b>        | Rho GTPase activating protein 18  | -  | 663                          | 6q23.1                     | NM_033515.2                                 | ENSG00000146376 | 93663                 | -           | FLJ25728   | bA307O14.2, MACGAP, MGC126757, MGC138145  |

**Table 1.** Nomenclature of human Rho family GAPs, with additional information

|                 |                                  |                                  |      |          |   |                 |        |          |                    |  |
|-----------------|----------------------------------|----------------------------------|------|----------|---|-----------------|--------|----------|--------------------|--|
| <b>ARHGAP19</b> | Rho GTPase activating protein 19 | -                                | 494  | 10q24.2  | NM_032900   | ENSG00000213390 | 84986  | -        | FLJ00194           | MGC14258, Rho-type GTPase-activating protein 19  |
| <b>ARHGAP20</b> | Rho GTPase activating protein 20 | -                                | 1191 | 11q23.2  | NM_020809.2   | ENSG00000137727 | 57569  | KIAA1391 | -                  | RARHOGAP   |
| <b>ARHGAP21</b> | Rho GTPase activating protein 21 | -                                | 1957 | 10p12.31 | NM_020824.3   | ENSG00000107863 | 57584  | KIAA1424 | FLJ33323, FLJ90108 | ARHGAP10, DKFZp761L0424, Rho GTPase-activating protein 10  |
| <b>ARHGAP22</b> | Rho GTPase activating protein 22 | -                                | 698  | 10q11.22 | NM_001256024.1, NM_001256025.2, NM_001256026.1, NM_021226.3 | ENSG00000128805 | 58504  | -        | FLJ45681           | LOC58504, Rho-type GTPase-activating protein 22, RHOGAP2   |
| <b>ARHGAP23</b> | Rho GTPase activating protein 23 | -                                | 1491 | 17q21    | NM_020876.1   | ENSG00000225485 | 57636  | KIAA1501 | -                  | -  |
| <b>ARHGAP24</b> | Rho GTPase activating protein 24 | -                                | 748  | 4q22.1   | NM_001025616.2, NM_001042669.1, NM_031305.2                 | ENSG00000138639 | 83478  | -        | FLJ33877           | FilGAP, DKFZp564B1162, Filamin-A-associated RhoGAP, RAC1-and CDC42-specific GTPase-activating protein of 72 kDa, Sarcoma antigen NY-SAR-88, p73, p73RhoGAP, RCGAP72, RC-GAP72, RhoGAP of 73 kDa  |
| <b>ARHGAP25</b> | Rho GTPase activating protein 25 | -                                | 645  | 2p13.3   | NM_001007231.2, NM_001166276.1, NM_001166277.1, NM_014882.2 | ENSG00000163219 | 9938   | KIAA0053 | -                  | KAIA0053   |
| <b>ARHGAP26</b> | Rho GTPase activating protein 26 | -                                | 814  | 5q31     | NM_001135608.1, NM_015071.4                                 | ENSG00000145819 | 23092  | KIAA0621 | FLJ42530           | GRAF, OPHN1L, Oligophrenin-1-like protein, OPHN1L1, GTPase regulator associated with the focal adhesion kinase pp125   |
| <b>ARHGAP27</b> | Rho GTPase activating protein 27 | SH3 domain containing 20, SH3D20 | 889  | 17q21.31 | NM_199282   | ENSG00000159314 | 201176 | -        | FLJ43547           | CAMGAP1, SH3P20, SH3D20, CIN85-associated multi-domain-containing Rho GTPase-activating protein 1, SH3 domain containing 20, PP905, Rho-type GTPase-activating protein 27  |
| <b>ARHGAP28</b> | Rho GTPase activating protein 28 | -                                | 729  | 18p11.23 | NM_001010000.1, NM_030672.2                                 | ENSG00000088756 | 79822  | KIAA1314 | FLJ10312, FLJ10312 | DKFZp686A2038  |
| <b>ARHGAP29</b> | Rho GTPase activating protein 29 | -                                | 1261 | 1p22.1   | NM_004815.3   | ENSG00000137962 | 9411   | -        | -                  | PTPL1-associated RhoGAP protein 1, PARG1, RP11-255E17.1  |
| <b>ARHGAP30</b> | Rho GTPase activating protein 30 | -                                | 1101 | 1q23.3   | NM_181720   | ENSG00000186517 | 257106 | -        | FLJ00267           | Rho-type GTPase-activating protein 30  |
| <b>ARHGAP31</b> | Rho GTPase activating protein 31 | -                                | 1444 | 3q13.33  | NM_020754.2   | ENSG00000031081 | 57514  | KIAA1204 | -                  | CDGAP, Cdc42 GTPase-activating protein, MGC138368, MGC138370, GRIT,  |
| <b>ARHGAP32</b> | Rho GTPase activating protein 32 | -                                | 2087 | 11q24.3  | NM_001142685.1, NM_014715.3                                 | ENSG00000134909 | 9743   | KIAA0712 | -                  | ARHGAP32, GAB-associated Cdc42/Rac GTPase-activating protein, GC-GAP, GTPase regulator interacting with TrkA, MGC1892, Rho/Cdc42/Rac GTPase-activating protein RICS, MGC1892, p250GAP, RhoGAP involved in the $\beta$ -catenin-N-cadherin and NMDA receptor signaling, PX-RICS, RICS, p200RhoGAP |

**Table 1.** Nomenclature of human Rho family GAPs, with additional information

|                 |   |   |      |            |   |                 |        |          |                    |  |
|-----------------|---|---|------|------------|---|-----------------|--------|----------|--------------------|--|
| <b>ARHGAP33</b> | Rho GTPase activating protein 33                          | SNX26, sorting nexin 26                       | 1287 | 19q13.13   | NM_052948                                   | ENSG00000004777 | 115703 | -        | FLJ39019           | TCGAP, Rho-type GTPase-activating protein 33, Tc10/CDC42 GTPase-activating protein, NOMA-GAP, neurite outgrowth multiadaptor RhoGAP protein                |
| <b>ARHGAP35</b> | Rho GTPase activating protein 35                          | -   | 1499 | 19q13.32   | NM_004491.4                                 | ENSG00000160007 | 2909   | KIAA1722 | -                  | ARHGAP35, Glucocorticoid receptor repression factor 1, glucocorticoid receptor DNA binding factor 1GRF-1, GRLF1, MGC10745, p190ARhoGAP, p190-A, p190RhoGAP |
| <b>ARHGAP36</b> | Rho GTPase activating protein 36                          | -   | 547  | Xq26.1     | NM_144967.3                                 | ENSG00000147256 | 158763 | -        | FLJ30058           | RP13-102H20.1, AK054620  |
| <b>ARHGAP39</b> | Rho GTPase Activating protein 39                          | -   | 1083 | 8q24.3     | NM_025251                                   | ENSG00000147799 | 80728  | KIAA1688 | -                  | Vilse, CrGAP   |
| <b>ARHGAP40</b> | Rho GTPase activating protein 40                          | C20orf95, chromosome 20 open reading frame 95 | 622  | 20q11.23   | XM_293123                                   | ENSG00000124143 | 343578 | -        | -                  | Rho-type GTPase-activating protein 40, dJ1100H13.4   |
| <b>ARHGAP42</b> | Rho GTPase activating protein 42                          | -   | 874  | 11q22.1    | NM_152432.2                                 | ENSG00000165895 | 143872 | -        | FLJ32810           | GRAF3, AK057372  |
| <b>ARHGAP44</b> | Rho GTPase activating protein 44                          | -   | 818  | 17p12      | NM_014859.4                                 | ENSG00000006740 | 9912   | KIAA0672 | -                  | NPC-A-10, Rho-type GTPase-activating protein RICH2, RhoGAP interacting with CIP4 homologs protein 2, RICH-2  |
| <b>ABR</b>      | active BCR-related gene                                   | -   | 859  | 17p13      | NM_001092.3, NM_001159746.1, NM_021962.2    | ENSG00000159842 | 29     | -        | FLJ45954           | Active breakpoint cluster region-related protein, MDB  |
| <b>ARAP1</b>    | ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 1 | -   | 1450 | 11q13.3    | NM_001040118.2, NM_001135190.1, NM_015242.4 | ENSG00000186635 | 116985 | KIAA0782 | -                  | CENTD2, Cnt-d2, Centaurin-delta-2  |
| <b>ARAP2</b>    | ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2 | -   | 1704 | 4p15.1     | NM_015230.2                                 | ENSG00000047365 | 116984 | KIAA0580 | FLJ44916, FLJ13675 | CENTD1, ANK repeat and PH domain-containing protein 2, PARX, Centaurin-delta-1, Cnt-d1,  |
| <b>ARAP3</b>    | ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3 | Centaurin-delta-3                             | 1544 | 5q31.3     | NM_022481.5                                 | ENSG00000120318 | 64411  | -        | FLJ21065, FLJ21065 | CENTD3, Cnt-d3, DRAG1,   |
| <b>BCR</b>      | breakpoint cluster region                                 | -   | 1271 | 22q11      | NM_004327.3, NM_021574.2                    | ENSG00000186716 | 613    | -        | FLJ16453           | ALL, BCR1, CML, Renal carcinoma antigen, NY-REN-26, D22S11, D22S662,   |
| <b>BNIP2</b>    | BCL2/adenovirus E1B 19kDa interacting protein 2           | -   | 314  | 15q21.3    | NM_004330                                   | ENSG00000140299 | 663    | -        | -                  | BNIP-2, Nip2   |
| <b>CHN1</b>     | chimerin (chimaerin) 1                                    | CHN, DURS2                                    | 459  | 2q31-q32.1 | NM_001025201.2, NM_001822.4                 | ENSG00000128656 | 1123   | -        | -                  | ARHGAP2, RhoGAP2, Rho GTPase-activating protein 2, A( $\alpha$ )-chimaerin, NC   |
| <b>CHN2</b>     | chimerin (chimaerin) 2                                    | -   | 468  | 7p15.3     | NM_001039936.1, NM_004067.2                 | ENSG00000106069 | 1124   | -        | -                  | ARHGAP3, Rho GTPase-activating protein 3, RhoGAP3, MGC138360, Beta-chimaerin, BCH  |

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|               |  |   |      |               |  |                 |       |          |                       |   |
|---------------|--|---|------|---------------|--|-----------------|-------|----------|-----------------------|---|
| <b>DLC1</b>   | deleted in liver cancer 1                                    | -   | 1528 | 8p22          | NM_001164271.1,<br>NM_006094.4,<br>NM_024767.3,<br>NM_182643.2 | ENSG00000164741 | 10395 | KIAA1723 | FLJ21120              | ARHGAP7, START domain-containing 12, Rho GTPase-activating protein 7, HP, H protein, STARD12, StAR-related lipid transfer protein 12, p122-RhoGAP           |
| <b>FAM13A</b> | family with sequence similarity 13, member A                 | FAM13A1, family with sequence similarity 13, member A1  | 1023 | 4q22.1        | NM_001015045   | ENSG00000138640 | 10144 | KIAA0914 | -                     | ARHGAP48, FAM13A1_v2 protein,   |
| <b>FAM13B</b> | family with sequence similarity 13, member B                 | C5orf5, chromosome 5 open reading frame 5, FAM13B1, family with sequence similarity 13, member B1 | 915  | 5q31          | NM_016603  | ENSG00000031003 | 51306 | -        | FLJ26735,             | chromosome 5 open reading frame 5, KHCHP, GAP-like protein N61, hypothetical protein LOC51306, MGC57159, DKFZp667F249, FAM13B1, C5ORF5, ARHGAP49            |
| <b>GMIP</b>   | GEM interacting protein                                      | -   | 970  | 19p13.11      | NM_016573.2  | ENSG00000089639 | 51291 | -        | -                     | LOC51291, ARHGAP46  |
| <b>HMHA1</b>  | histocompatibility (minor) HA-1                              | -   | 1136 | 19p13.3       | NM_012292.2  | ENSG00000180448 | 23526 | KIAA0223 | -                     | HA-1, Minor histocompatibility protein HA-1, HLA-HA1, ARHGAP45  |
| <b>INPP5B</b> | inositol polyphosphate-5-phosphatase, 75kDa                  | -   | 993  | 1p34          | NM_005540.2  | ENSG00000204084 | 3633  | -        | -                     | 5PTase, 75 kDa inositol polyphosphate-5-phosphatase, MGC65156, MGC71303, Phosphoinositide 5-phosphatase, Type II inositol-1,4,5-trisphosphate 5-phosphatase |
| <b>MYO9A</b>  | myosin IXA   | -   | 2548 | 15q22-q23     | NM_006901.2  | ENSG00000066933 | 4649  | -        | FLJ13244,<br>FLJ11061 | Unconventional myosin-9a, MGC71859, MYR7  |
| <b>MYO9B</b>  | myosin IXB   | CELIAC4   | 2157 | 19p13.1       | NM_001130065.1,<br>NM_004145.3                                 | ENSG00000099331 | 4650  | -        | -                     | Unconventional myosin-9b, MYR5  |
| <b>OCRL</b>   | oculocerebrorenal syndrome of Lowe                           | -   | 901  | Xq25          | NM_000276.3,<br>NM_001587.3                                    | ENSG00000122126 | 4952  | -        | -                     | INPP5F, Inositol polyphosphate 5-phosphatase OCRL-1, LOCR, NPHL2, OCRL1   |
| <b>OPHN1</b>  | Oligophrenin 1   | MRX60   | 802  | Xq12          | NM_002547.2  | ENSG00000079482 | 4983  | -        | -                     | OPN1, ARHGAP41  |
| <b>PIK3R1</b> | phosphoinositide-3-kinase, regulatory subunit 1 ( $\alpha$ ) | -   | 724  | 5q13.1        | NM_181504.2,<br>NM_181523.1,<br>NM_181524.1                    | ENSG00000145675 | 5295  | -        | -                     | GRB1, PI3-kinase subunit p85- $\alpha$ , p85-ALPHA, p85, PtdIns-3-kinase regulatory subunit p85- $\alpha$ , PI3K regulatory subunit $\alpha$                |
| <b>PIK3R2</b> | phosphoinositide-3-kinase, regulatory subunit 2 ( $\beta$ )  | -   | 728  | 19q13.2-q13.4 | NM_005027.2  | ENSG00000105647 | 5296  | -        | -                     | p85, p85-BETA, P85B, PtdIns-3-kinase regulatory subunit p85- $\beta$ , PI3K regulatory subunit $\beta$  |

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|                 |  |                                 |      |           |   |                 |       |                        |          |   |
|-----------------|--|---------------------------------|------|-----------|---|-----------------|-------|------------------------|----------|---|
| <b>RACGAP1</b>  | Rac GTPase activating protein 1                                  | -                               | 632  | 12q13     | NM_001126103.1,<br>NM_001126104.1,<br>NM_013277.3 | ENSG00000161800 | 29127 | KIAA1478               | -        | HsCYK-4, Male germ cell RacGap, ID-GAP, MgcRacGAP   |
| <b>RACGAP1P</b> | Rac GTPase activating protein 1 pseudogene                       | -                               | -    | 12q12     | -   | -               | 83956 | -                      | -        | FKSG42  |
| <b>RALBP1</b>   | ralA binding protein 1   | -                               | 655  | 18p11.22  | NM_006788   | ENSG00000017797 | 10928 | -                      | -        | RIP, Ral-interacting protein 1, RLIP76, RIP1, DNP-SG ATPase, Dinitrophenyl S-glutathione ATPase, 76 kDa Ral-interacting protein, RalBP1                               |
| <b>SH3BP1</b>   | SH3-domain binding protein 1                                     | -                               | 701  | 22q13.1   | NM_018957.3                                       | ENSG00000100092 | 23616 | -                      | -        | ARHGAP43  |
| <b>SRGAP1</b>   | SLIT-ROBO Rho GTPase activating protein 1                        | -                               | 1085 | 12q13.13  | NM_020762.2                                       | ENSG00000196935 | 57522 | KIAA1304               | FLJ22166 | ARHGAP13, Rho GTPase-activating protein 13, srGAP1  |
| <b>SRGAP2</b>   | SLIT-ROBO Rho GTPase activating protein 2                        | Formin-binding protein 2, FBNP2 | 1071 | 1q32.1    | NM_001042758.1,<br>NM_001170637.1,<br>NM_015326.2 | ENSG00000163486 | 23380 | KIAA0456               | -        | ARHGAP34, srGAP2  |
| <b>SRGAP3</b>   | SLIT-ROBO Rho GTPase activating protein 3                        | -                               | 1099 | 3p25.3    | NM_001033117.1,<br>NM_014850.2                    | ENSG00000196220 | 9901  | KIAA0411,<br>KIAA1156, | -        | ARHGAP14, Mental disorder-associated GAP, MEGAP, Rho GTPase-activating protein 14, WAVE-associated Rac GTPase-activating protein, WRP, srGAP3                         |
| <b>STARD8</b>   | StAR-related lipid transfer (START) domain containing 8          | -                               | 1023 | Xq13.1    | NM_001142503.2,<br>NM_001142504.2,<br>NM_014725.4 | ENSG00000130052 | 9754  | KIAA0189               | -        | Deleted in liver cancer 3 protein, DLC3, DKFZp686H1668, START domain-containing protein 8, StAR-related lipid transfer protein 8, DLC-3, START-GAP3, StARD8, ARHGAP38 |
| <b>STARD13</b>  | StAR-related lipid transfer (START) domain containing 13         | START domain-containing 13      | 1113 | 13q12-q13 | NM_052851.2,<br>NM_178006.3,<br>NM_178007.2       | ENSG00000133121 | 90627 | -                      | FLJ37385 | DLC-2, ARHGAP37, GT650, Deleted in liver cancer 2 protein, 46H23.2, LOC90627  |
| <b>SYDE1</b>    | synapse defective 1, Rho GTPase, homolog 1 ( <i>C. elegans</i> ) | -                               | 735  | 19p13.12  | NM_033025   | ENSG00000105137 | 85360 | -                      | FLJ13511 | 7h3, Protein syd-1 homolog 1, EC 2.4.1.25, EC 2.6.1.9,  |
| <b>SYDE2</b>    | synapse defective 1, Rho GTPase, homolog 2 ( <i>C. elegans</i> ) | -                               | 1194 | 1p22.3    | NM_032184   | ENSG00000097096 | 84144 | -                      | FLJ13815 | Protein syd-1 homolog 2, RP11-33E12.1   |

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|                                      |  |  |             |          |                                       |                 |        |          |          |  |
|--------------------------------------|--|--|-------------|----------|---------------------------------------|-----------------|--------|----------|----------|--|
| <b>TAGAP</b>                         | T-cell activation RhoGTPase activating protein | T-cell activation GTPase activating protein            | 731         | 6q25.3   | NM_054114.3, NM_138810.2, NM_152133.1 | ENSG00000164691 | 117289 | -        | FLJ32631 | LOC135088, IDDM21, ARHGAP47, TAGAP1          |
| <b>discontinued</b>                  | -  | -  | -           | 10q24.1  | -                                     | -               | -      | -        | -        | LOC118743                                    |
| <b>discontinued</b>                  | -  | -  | -           | 6q14.3   | -                                     | -               | -      | -        | -        | LOC94677                                     |
| <b>discontinued</b>                  | -  | -  | -           | 16p11.2  | -                                     | -               | -      | KIAA1501 | -        | LOC94790                                     |
| <b>discontinued</b>                  | -  | -  | -           | 19p13.13 | -                                     | -               | -      | -        | -        | F02569_2, LOC199741                          |
| <b>discontinued</b>                  | -  | -  | -           | 20q11.23 | -                                     | -               | -      | -        | -        | dJ1100H13,4, LOC164209                       |
| <b>discontinued</b>                  | -  | -  | -           | 2q21.1   | -                                     | -               | -      | -        | -        | LOC129896                                    |
| <b>discontinued</b>                  | -  | -  | -           | 12q12    | -                                     | -               | -      | -        | -        | LOC121702                                    |
| <b>ARHGAP16P</b>                     | Rho GTPase activating protein 16 pseudogene    | ARHGAP15P, Rho GTPase activating protein 15 pseudogene | pseudo-gene | 14q21.2  | NG_002492                             | ENSG00000258894 | 319102 | -        | -        | Rho GTPase activating protein 15 pseudo-gene |
| <b>replaced with Gene ID: 115703</b> | -  | -  | -           | 19q13.13 | -                                     | -               | 115703 | -        | -        | DKFZP434A1010                                |