**Supplementary File 1**

**Supplementary File 1a.** The gene list and basemean of the total of 148 differentially expressed genes in the overlapped region of the Venn diagram.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene ID | Name | Con | *cyp17a1*-/- | *cyp17a1*-/-;*ar*-/- | *cyp17a1*-/-;*ar*-/-;*npgr*-/- |
| ENSDARG00000071095 | *abi3bpb* | 83.78  | 46.47  | 53.21  | 349.48  |
| ENSDARG00000045180 | *acta2* | 5439.52  | 1621.49  | 812.51  | 78.30  |
| ENSDARG00000001431 | *actn3b* | 671.30  | 647.59  | 554.64  | 253.99  |
| ENSDARG00000103519 | *adamts1* | 28.28  | 31.32  | 48.10  | 262.59  |
| ENSDARG00000061348 | *adat1* | 318.37  | 245.50  | 268.11  | 70.66  |
| ENSDARG00000026764 | *ahsg1* | 672.35  | 1679.08  | 1148.16  | 222.48  |
| ENSDARG00000075067 | *aipl1* | 85.88  | 74.76  | 72.66  | 14.32  |
| ENSDARG00000006546 | *ak4* | 2138.53  | 857.72  | 795.11  | 348.53  |
| ENSDARG00000113858 | *AL928650.4* | 605.32  | 633.44  | 202.62  | 1.00  |
| ENSDARG00000097208 | *alkbh3* | 419.96  | 245.50  | 218.99  | 70.66  |
| ENSDARG00000035859 | *angptl4* | 590.66  | 446.54  | 446.16  | 89.76  |
| ENSDARG00000076320 | *ano9a* | 436.71  | 279.85  | 343.83  | 105.04  |
| ENSDARG00000101324 | *apoa1b* | 28.28  | 6272.81  | 4627.42  | 211.02  |
| ENSDARG00000015866 | *apoa2* | 13.61  | 3264.20  | 2398.65  | 85.94  |
| ENSDARG00000010654 | *arhgap42b* | 273.34  | 145.48  | 196.48  | 37.24  |
| ENSDARG00000114760 | *asip2b* | 474.41  | 177.81  | 262.99  | 59.20  |
| ENSDARG00000001870 | *atp1a1a.4* | 566.57  | 605.16  | 398.07  | 157.55  |
| ENSDARG00000099412 | *bcan* | 42.94  | 84.86  | 56.28  | 507.03  |
| ENSDARG00000109968 | *BX537120.1* | 165.47  | 102.04  | 71.63  | 13.37  |
| ENSDARG00000112176 | *BX537120.2* | 278.57  | 169.73  | 138.15  | 21.96  |
| ENSDARG00000116369 | *BX537120.3* | 515.26  | 314.20  | 266.06  | 82.12  |
| ENSDARG00000039098 | *ca8* | 518.40  | 275.81  | 375.56  | 66.84  |
| ENSDARG00000098248 | *CABZ01081730.1* | 161.28  | 50.51  | 72.66  | 6.68  |
| ENSDARG00000041107 | *cftr* | 1024.23  | 816.30  | 690.74  | 115.54  |
| ENSDARG00000015955 | *cldnc* | 962.44  | 557.67  | 333.60  | 134.64  |
| ENSDARG00000093267 | *cngk* | 15248.25  | 15922.96  | 13442.24  | 5530.57  |
| ENSDARG00000099493 | *CR847906.1* | 33.51  | 57.59  | 25.58  | 1.00  |
| ENSDARG00000007795 | *cst3* | 4093.78  | 3337.95  | 3650.16  | 1732.12  |
| ENSDARG00000013771 | *ctss2.2* | 143.48  | 113.15  | 166.80  | 480.30  |
| ENSDARG00000113786 | *CU896602.3* | 1.00  | 2.02  | 1.02  | 40.10  |
| ENSDARG00000041799 | *cx43* | 2770.03  | 1554.82  | 1986.25  | 548.09  |
| ENSDARG00000055100 | *cxcl12b* | 202.12  | 125.27  | 123.82  | 38.19  |
| ENSDARG00000097556 | *cyp8b2* | 111.01  | 101.03  | 91.07  | 20.05  |
| ENSDARG00000018856 | *dclk1a* | 732.04  | 851.66  | 770.55  | 194.79  |
| ENSDARG00000014626 | *dlx3b* | 26.18  | 19.20  | 10.23  | 119.36  |
| ENSDARG00000092662 | *dnaaf3* | 220.97  | 78.80  | 183.17  | 1.00  |
| ENSDARG00000038788 | *dnai1.2* | 2085.11  | 1646.75  | 1598.42  | 774.39  |
| ENSDARG00000010745 | *dnaja2b* | 959.30  | 781.95  | 612.96  | 192.88  |
| ENSDARG00000004979 | *elovl5* | 275.43  | 470.79  | 298.81  | 80.21  |
| ENSDARG00000015228 | *ero1a* | 175.94  | 173.77  | 201.59  | 494.62  |
| ENSDARG00000014239 | *esyt1b* | 706.91  | 805.19  | 898.47  | 224.39  |
| ENSDARG00000100782 | *f7l* | 401.10  | 272.77  | 303.92  | 82.12  |
| ENSDARG00000061354 | *foxred2* | 210.50  | 293.99  | 326.44  | 66.84  |
| ENSDARG00000104500 | *fyco1a* | 381.21  | 422.30  | 351.00  | 135.59  |
| ENSDARG00000100003 | *glulb* | 2389.87  | 2769.17  | 2834.58  | 963.46  |
| ENSDARG00000043342 | *gpx3* | 705.86  | 436.44  | 572.03  | 81.16  |
| ENSDARG00000075301 | *gsdf* | 16053.60  | 11421.17  | 12444.51  | 4800.10  |
| ENSDARG00000013787 | *gucy1a1* | 401.10  | 413.20  | 377.60  | 82.12  |
| ENSDARG00000003903 | *hapln2* | 67.03  | 48.49  | 40.93  | 1.00  |
| ENSDARG00000027609 | *hpn* | 880.75  | 710.22  | 637.52  | 306.51  |
| ENSDARG00000058365 | *hspb8* | 2050.55  | 1355.79  | 735.76  | 311.29  |
| ENSDARG00000052895 | *htra3a* | 474.41  | 396.03  | 344.86  | 160.42  |
| ENSDARG00000025348 | *igfbp5b* | 793.83  | 501.10  | 663.11  | 133.68  |
| ENSDARG00000040777 | *inhbb* | 618.94  | 588.99  | 759.30  | 1503.91  |
| ENSDARG00000035862 | *insl3* | 2013.90  | 7188.12  | 6295.42  | 19.10  |
| ENSDARG00000098012 | *itgae.1* | 264.96  | 288.94  | 334.62  | 692.28  |
| ENSDARG00000057626 | *josd2* | 1055.65  | 1070.89  | 903.59  | 401.04  |
| ENSDARG00000104665 | *kirrel3l* | 1942.69  | 1437.62  | 1553.39  | 696.10  |
| ENSDARG00000045275 | *klhl14* | 13.61  | 12.12  | 15.35  | 72.57  |
| ENSDARG00000017624 | *krt4* | 1183.41  | 530.40  | 1013.08  | 240.63  |
| ENSDARG00000036830 | *krt91* | 2196.12  | 579.90  | 1038.66  | 201.48  |
| ENSDARG00000104654 | *leap2* | 347.69  | 252.57  | 96.19  | 5.73  |
| ENSDARG00000040528 | *lgals3bpb* | 1120.58  | 1781.12  | 3185.57  | 7628.41  |
| ENSDARG00000068247 | *luzp2* | 99.49  | 67.69  | 100.28  | 11.46  |
| ENSDARG00000063583 | *map2k4a* | 497.45  | 425.33  | 431.84  | 179.51  |
| ENSDARG00000068726 | *masp1* | 397.96  | 322.28  | 270.15  | 105.04  |
| ENSDARG00000053215 | *me1* | 641.98  | 533.43  | 392.95  | 166.15  |
| ENSDARG00000002795 | *meis3* | 194.79  | 190.94  | 328.48  | 1004.52  |
| ENSDARG00000079105 | *mhc2dab* | 613.70  | 795.09  | 103.35  | 2089.24  |
| ENSDARG00000011373 | *mknk2a* | 840.96  | 940.57  | 1252.54  | 270.23  |
| ENSDARG00000033610 | *morn5* | 1672.49  | 2172.09  | 1810.24  | 411.55  |
| ENSDARG00000043093 | *mpeg1.2* | 112.06  | 197.00  | 266.06  | 578.65  |
| ENSDARG00000028740 | *msnb* | 2061.03  | 1888.21  | 2435.49  | 954.86  |
| ENSDARG00000038123 | *myl9a* | 923.69  | 476.85  | 522.91  | 183.33  |
| ENSDARG00000078474 | *myo15ab* | 710.05  | 721.34  | 531.10  | 254.95  |
| ENSDARG00000115421 | *n6amt1* | 134.05  | 110.12  | 119.73  | 380.04  |
| ENSDARG00000011170 | *ndrg2* | 463.94  | 401.08  | 590.45  | 164.24  |
| ENSDARG00000078261 | *nphp3* | 958.25  | 924.40  | 831.95  | 385.76  |
| ENSDARG00000006848 | *parp9* | 796.97  | 367.74  | 568.96  | 1.00  |
| ENSDARG00000052494 | *pcdh18b* | 434.62  | 257.62  | 174.99  | 65.89  |
| ENSDARG00000035966 | *pgr* | 470.22  | 399.06  | 453.33  | 52.52  |
| ENSDARG00000042010 | *pklr* | 695.39  | 1190.11  | 2201.15  | 263.54  |
| ENSDARG00000038941 | *ppp1r1c* | 270.20  | 645.57  | 816.60  | 29.60  |
| ENSDARG00000079274 | *prss59.1* | 7.33  | 42.43  | 45.03  | 146.09  |
| ENSDARG00000031885 | *psmb12* | 138.24  | 51.52  | 105.40  | 554.78  |
| ENSDARG00000001656 | *psmb13a* | 127.77  | 31.32  | 129.96  | 450.70  |
| ENSDARG00000001303 | *psmb8a* | 240.87  | 88.90  | 176.01  | 719.01  |
| ENSDARG00000000656 | *psmb9a* | 152.90  | 35.36  | 111.54  | 392.45  |
| ENSDARG00000021184 | *rbfox1l* | 65.98  | 80.82  | 78.80  | 3.82  |
| ENSDARG00000070038 | *rbp2a* | 272.29  | 147.50  | 165.78  | 19.10  |
| ENSDARG00000019396 | *rergla* | 145.57  | 309.14  | 100.28  | 18.14  |
| ENSDARG00000012506 | *rnpep* | 230.40  | 224.28  | 204.66  | 650.26  |
| ENSDARG00000100188 | *RNPS1* | 388.54  | 215.19  | 98.24  | 16.23  |
| ENSDARG00000036773 | *s100s* | 3.14  | 48.49  | 1.00  | 180.47  |
| ENSDARG00000038574 | *scg2b* | 247.16  | 109.11  | 115.63  | 31.51  |
| ENSDARG00000006307 | *shisa4* | 1919.65  | 1202.23  | 1870.62  | 439.24  |
| ENSDARG00000031745 | *si:busm1-266f07.2* | 852.48  | 808.22  | 210.80  | 2243.93  |
| ENSDARG00000097615 | *si:ch211-108d22.2* | 98.44  | 90.92  | 109.49  | 8.59  |
| ENSDARG00000090930 | *si:ch211-120g10.1* | 109.96  | 66.68  | 49.12  | 1.00  |
| ENSDARG00000094016 | *si:ch211-130h14.4* | 1157.23  | 912.28  | 862.65  | 421.09  |
| ENSDARG00000100771 | *si:ch211-160d14.15* | 532.01  | 272.77  | 81.87  | 1.00  |
| ENSDARG00000089627 | *si:ch211-160d20.5* | 493.26  | 381.88  | 306.99  | 140.36  |
| ENSDARG00000077239 | *si:ch211-165i18.2* | 207.36  | 326.32  | 190.34  | 867.02  |
| ENSDARG00000093284 | *si:ch211-173m16.2* | 244.01  | 132.35  | 406.26  | 1.00  |
| ENSDARG00000071355 | *si:ch211-197g15.7* | 58.65  | 60.62  | 113.59  | 246.35  |
| ENSDARG00000088656 | *si:ch211-212k18.6* | 672.35  | 502.11  | 599.66  | 231.08  |
| ENSDARG00000102593 | *si:ch211-214b16.2* | 141.38  | 229.33  | 40.93  | 1.00  |
| ENSDARG00000074345 | *si:ch211-214b16.4* | 247.16  | 254.59  | 73.68  | 1.00  |
| ENSDARG00000098915 | *si:ch211-216p19.5* | 601.13  | 610.21  | 512.68  | 242.54  |
| ENSDARG00000093748 | *si:ch211-217k17.11* | 179.08  | 168.72  | 332.58  | 811.63  |
| ENSDARG00000101968 | *si:ch211-227p7.1* | 68.07  | 85.87  | 37.86  | 1.00  |
| ENSDARG00000093630 | *si:ch211-249h16.8* | 1036.80  | 1130.50  | 863.68  | 413.46  |
| ENSDARG00000094492 | *si:ch211-284e13.12* | 1.05  | 0.00  | 1.00  | 35.33  |
| ENSDARG00000102856 | *si:ch73-59f11.3* | 51.32  | 38.39  | 57.31  | 2.86  |
| ENSDARG00000087633 | *si:dkey-11o18.5* | 1054.60  | 809.23  | 714.27  | 115.54  |
| ENSDARG00000099428 | *si:dkey-15h8.17* | 130.91  | 271.76  | 258.90  | 1665.28  |
| ENSDARG00000070857 | *si:dkey-32e6.6* | 75.40  | 204.08  | 156.57  | 529.95  |
| ENSDARG00000092361 | *si:dkey-79f11.7* | 229.35  | 222.26  | 146.33  | 48.70  |
| ENSDARG00000095309 | *si:dkey-79f11.9* | 1.00  | 0.00  | 17.40  | 83.07  |
| ENSDARG00000096906 | *si:dkey-7i4.24* | 65.98  | 124.26  | 191.36  | 896.62  |
| ENSDARG00000057262 | *si:dkey-91i10.3* | 676.54  | 303.08  | 237.41  | 77.34  |
| ENSDARG00000095407 | *si:dkey-9i23.8* | 2.09  | 3.03  | 2.05  | 137.50  |
| ENSDARG00000088881 | *si:dkeyp-69b9.3* | 270.20  | 322.28  | 445.14  | 40.10  |
| ENSDARG00000073704 | *si:dkeyp-72g9.4* | 53.41  | 46.47  | 42.98  | 1.00  |
| ENSDARG00000020984 | *slc16a10* | 2695.67  | 1982.16  | 1788.75  | 782.03  |
| ENSDARG00000088891 | *slc23a3* | 42.94  | 47.48  | 41.96  | 2.86  |
| ENSDARG00000054423 | *slc7a6* | 1859.95  | 1278.00  | 1059.13  | 512.76  |
| ENSDARG00000079781 | *slitrk4* | 20.95  | 21.22  | 15.35  | 135.59  |
| ENSDARG00000051763 | *sntb2* | 2186.70  | 1766.97  | 1748.84  | 833.60  |
| ENSDARG00000035459 | *spns3* | 732.04  | 298.03  | 277.32  | 62.07  |
| ENSDARG00000028367 | *sult2st3* | 173.85  | 152.55  | 99.26  | 7.64  |
| ENSDARG00000060711 | *sv2bb* | 1154.09  | 845.60  | 776.69  | 136.55  |
| ENSDARG00000045408 | *tagln* | 3751.32  | 1034.52  | 561.80  | 111.72  |
| ENSDARG00000092774 | *tarsl2* | 116.25  | 165.69  | 76.75  | 427.78  |
| ENSDARG00000042637 | *tert* | 529.92  | 1313.36  | 1116.43  | 220.57  |
| ENSDARG00000097920 | *tex36* | 484.89  | 426.34  | 484.03  | 198.61  |
| ENSDARG00000040249 | *tlr18* | 358.17  | 362.69  | 264.01  | 66.84  |
| ENSDARG00000027129 | *tmem218* | 611.61  | 675.87  | 558.73  | 260.68  |
| ENSDARG00000020890 | *tmod4* | 204.22  | 165.69  | 198.52  | 44.88  |
| ENSDARG00000091221 | *ttc34* | 515.26  | 432.40  | 351.00  | 155.64  |
| ENSDARG00000039522 | *tubb2* | 23.04  | 3.03  | 5.12  | 240.63  |
| ENSDARG00000044400 | *wdr78* | 618.94  | 486.95  | 439.00  | 203.39  |
| ENSDARG00000040159 | *wnt4b* | 30.37  | 53.54  | 100.28  | 232.03  |
| ENSDARG00000110510 | *ybey* | 249.25  | 98.00  | 264.01  | 0.95  |
| ENSDARG00000103947 | *zgc:113295* | 80.64  | 81.83  | 65.49  | 1.00  |
| ENSDARG00000102241 | *zgc:136410* | 45.03  | 40.41  | 134.05  | 443.06  |
| ENSDARG00000078423 | *zgc:194285* | 84.83  | 136.39  | 171.92  | 349.48  |
| ENSDARG00000069796 | *znf1124* | 38.75  | 53.54  | 146.33  | 374.31  |

**Supplementary File 1b.** The gene list and basemean of the total of 111 differentially expressed genes in the overlapped region of the Venn diagram.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene ID | Name | Con | *ar*-/- | *ar*-/-;*npgr*-/- | *cyp17a1*-/-;*ar*-/-;*npgr*-/- |
| ENSDARG00000071095 | *abi3bpb* | 85.52  | 649.18  | 555.01  | 349.48  |
| ENSDARG00000045180 | *acta2* | 5552.62  | 830.65  | 465.24  | 78.30  |
| ENSDARG00000005595 | *adgb* | 3598.41  | 1602.36  | 687.08  | 1556.43  |
| ENSDARG00000079983 | *agbl2* | 4065.58  | 1758.58  | 903.73  | 1918.32  |
| ENSDARG00000006546 | *ak4* | 2182.99  | 578.09  | 546.38  | 348.53  |
| ENSDARG00000019001 | *ak7a* | 4062.37  | 1652.88  | 846.76  | 1743.58  |
| ENSDARG00000021913 | *ak9* | 5251.15  | 2213.19  | 1093.63  | 2495.06  |
| ENSDARG00000069518 | *aqp3b* | 227.71  | 10.29  | 6.91  | 15.28  |
| ENSDARG00000010654 | *arhgap42b* | 279.02  | 83.25  | 47.47  | 37.24  |
| ENSDARG00000055128 | *armc4* | 5180.59  | 2300.18  | 1034.07  | 2250.61  |
| ENSDARG00000092067 | *atn1* | 158.22  | 638.89  | 1085.86  | 481.25  |
| ENSDARG00000079453 | *atp8b4* | 1761.79  | 466.77  | 152.78  | 746.70  |
| ENSDARG00000116369 | *BX537120.3* | 525.97  | 103.83  | 118.25  | 82.12  |
| ENSDARG00000011166 | *cahz* | 1643.12  | 387.26  | 403.10  | 513.72  |
| ENSDARG00000053455 | *ccdc103* | 4852.40  | 2157.07  | 857.12  | 2241.07  |
| ENSDARG00000016161 | *ccdc170* | 1479.56  | 620.18  | 304.70  | 567.19  |
| ENSDARG00000027381 | *ccdc171* | 3219.96  | 1071.98  | 482.51  | 773.44  |
| ENSDARG00000077928 | *ccdc173* | 5444.65  | 2426.46  | 1066.87  | 2547.58  |
| ENSDARG00000089320 | *ccdc175* | 3181.48  | 1390.96  | 632.70  | 1315.80  |
| ENSDARG00000032372 | *ccdc180* | 2980.50  | 952.25  | 647.37  | 990.19  |
| ENSDARG00000041107 | *cftr* | 1045.53  | 190.82  | 189.90  | 115.54  |
| ENSDARG00000052764 | *chrnb3a* | 52.38  | 249.76  | 350.44  | 355.21  |
| ENSDARG00000093267 | *cngk* | 15565.29  | 5726.61  | 2024.98  | 5530.57  |
| ENSDARG00000069362 | *CR847571.1* | 174.25  | 24.32  | 28.48  | 23.87  |
| ENSDARG00000102899 | *cremb* | 6542.56  | 2644.42  | 1038.38  | 3109.99  |
| ENSDARG00000030980 | *csrp1b* | 376.30  | 58.00  | 25.89  | 6.68  |
| ENSDARG00000007795 | *cst3* | 4178.90  | 1713.68  | 1032.34  | 1732.12  |
| ENSDARG00000021462 | *daw1* | 9618.20  | 4289.81  | 2113.88  | 3878.66  |
| ENSDARG00000088693 | *dcst2* | 2872.52  | 1218.84  | 707.79  | 1330.13  |
| ENSDARG00000005221 | *desmb* | 427.62  | 14.03  | 31.94  | 16.23  |
| ENSDARG00000075825 | *dlec1* | 4941.13  | 1963.43  | 999.54  | 1904.95  |
| ENSDARG00000012030 | *dnaaf1* | 1915.73  | 782.94  | 378.06  | 846.96  |
| ENSDARG00000100115 | *dnah1* | 10155.93  | 4411.41  | 1503.63  | 4384.73  |
| ENSDARG00000100285 | *dnai2a* | 3487.22  | 1509.76  | 668.09  | 1411.29  |
| ENSDARG00000053498 | *ednrbb* | 3.21  | 80.45  | 215.79  | 792.54  |
| ENSDARG00000004979 | *elovl5* | 281.16  | 43.03  | 36.25  | 80.21  |
| ENSDARG00000070598 | *eno4* | 2892.84  | 1236.62  | 472.15  | 1144.88  |
| ENSDARG00000100426 | *fam167b* | 711.98  | 118.80  | 76.82  | 177.60  |
| ENSDARG00000004177 | *fam169ab* | 109.04  | 502.32  | 690.53  | 308.42  |
| ENSDARG00000001976 | *fkbp16* | 12.83  | 201.11  | 325.41  | 316.06  |
| ENSDARG00000073860 | *gas2l2* | 731.23  | 231.98  | 112.21  | 281.68  |
| ENSDARG00000043342 | *gpx3* | 720.54  | 85.12  | 120.84  | 81.16  |
| ENSDARG00000104686 | *hsf5* | 6674.05  | 2677.16  | 1120.38  | 2912.33  |
| ENSDARG00000058365 | *hspb8* | 2093.19  | 347.97  | 209.75  | 311.29  |
| ENSDARG00000056764 | *hydin* | 4956.09  | 1915.73  | 900.28  | 2351.83  |
| ENSDARG00000090953 | *igsf5b* | 197.77  | 22.45  | 11.22  | 55.38  |
| ENSDARG00000035862 | *insl3* | 2055.77  | 108.51  | 1.73  | 19.10  |
| ENSDARG00000068288 | *lamc2* | 1283.92  | 263.79  | 201.12  | 331.34  |
| ENSDARG00000076153 | *lca5* | 2604.19  | 1110.34  | 589.54  | 1221.27  |
| ENSDARG00000104654 | *leap2* | 354.92  | 1820.32  | 1752.22  | 5.73  |
| ENSDARG00000037278 | *lrata* | 218.09  | 15.90  | 36.25  | 21.96  |
| ENSDARG00000069698 | *lrguk* | 2280.27  | 886.77  | 525.67  | 843.14  |
| ENSDARG00000055839 | *MARCH4* | 3098.09  | 1288.07  | 479.05  | 1287.16  |
| ENSDARG00000079742 | *mcf2l2* | 358.13  | 107.57  | 68.19  | 124.13  |
| ENSDARG00000018008 | *mdh1b* | 2734.62  | 1130.92  | 404.82  | 1014.07  |
| ENSDARG00000002795 | *meis3* | 198.84  | 701.56  | 998.68  | 1004.52  |
| ENSDARG00000059657 | *mks1* | 2500.50  | 920.45  | 510.13  | 972.05  |
| ENSDARG00000104487 | *mthfs* | 2018.36  | 580.89  | 169.18  | 699.92  |
| ENSDARG00000008030 | *myl9b* | 3379.25  | 654.79  | 176.95  | 1459.03  |
| ENSDARG00000061635 | *myo5aa* | 52.38  | 181.47  | 320.23  | 172.83  |
| ENSDARG00000098944 | *nme8* | 3249.90  | 1425.57  | 828.64  | 1440.89  |
| ENSDARG00000042396 | *odf3b* | 3077.78  | 1170.20  | 489.41  | 1338.72  |
| ENSDARG00000038612 | *pih1d3* | 1447.49  | 587.44  | 309.88  | 627.35  |
| ENSDARG00000095386 | *pimr179* | 341.03  | 117.86  | 66.46  | 122.22  |
| ENSDARG00000068190 | *pimr188* | 718.40  | 212.34  | 100.13  | 270.23  |
| ENSDARG00000038941 | *ppp1r1c* | 275.81  | 58.93  | 42.29  | 29.60  |
| ENSDARG00000052121 | *rag2* | 1429.31  | 585.57  | 241.69  | 619.71  |
| ENSDARG00000061985 | *rbm47* | 1884.73  | 425.61  | 273.62  | 865.11  |
| ENSDARG00000023484 | *rflna* | 547.35  | 211.40  | 110.48  | 190.97  |
| ENSDARG00000074828 | *rhobtb2a* | 394.48  | 128.15  | 77.68  | 150.87  |
| ENSDARG00000012504 | *rlbp1a* | 171.05  | 40.22  | 28.48  | 20.05  |
| ENSDARG00000067606 | *rsph4a* | 5282.15  | 2013.95  | 872.66  | 2029.09  |
| ENSDARG00000090767 | *si:ch211-136m16.8* | 45.97  | 290.91  | 333.18  | 209.12  |
| ENSDARG00000053340 | *si:ch211-138g9.3* | 427.62  | 103.83  | 49.20  | 142.27  |
| ENSDARG00000077900 | *si:ch211-141o9.10* | 1530.87  | 489.22  | 195.94  | 514.67  |
| ENSDARG00000079705 | *si:ch211-152p11.4* | 1293.54  | 462.09  | 254.63  | 588.20  |
| ENSDARG00000089627 | *si:ch211-160d20.5* | 503.52  | 121.60  | 82.86  | 140.36  |
| ENSDARG00000098445 | *si:ch211-1o7.2* | 1399.38  | 295.59  | 72.51  | 570.05  |
| ENSDARG00000094491 | *si:ch211-202m22.1* | 503.52  | 179.60  | 75.96  | 187.15  |
| ENSDARG00000093734 | *si:ch211-209a2.2* | 3792.97  | 1488.24  | 647.37  | 1754.08  |
| ENSDARG00000095607 | *si:ch211-209f23.3* | 304.68  | 101.96  | 53.52  | 89.76  |
| ENSDARG00000097680 | *si:ch211-241f5.3* | 423.34  | 69.22  | 80.27  | 47.74  |
| ENSDARG00000093630 | *si:ch211-249h16.8* | 1058.35  | 392.87  | 214.06  | 413.46  |
| ENSDARG00000097256 | *si:ch211-270g19.5* | 492.83  | 56.12  | 34.53  | 68.75  |
| ENSDARG00000102101 | *si:ch73-174h16.5* | 3436.98  | 1528.47  | 816.55  | 1487.68  |
| ENSDARG00000095463 | *si:ch73-90k17.1* | 7.48  | 101.96  | 387.56  | 60.16  |
| ENSDARG00000099207 | *si:dkey-11f4.7* | 26.73  | 162.76  | 222.70  | 189.06  |
| ENSDARG00000087633 | *si:dkey-11o18.5* | 1076.53  | 253.50  | 70.78  | 115.54  |
| ENSDARG00000070511 | *si:dkey-183j2.10* | 58.80  | 1473.28  | 748.36  | 2501.74  |
| ENSDARG00000045094 | *si:dkey-222b8.1* | 375.23  | 82.32  | 53.52  | 108.85  |
| ENSDARG00000092275 | *si:dkey-234d14.2* | 769.71  | 277.82  | 164.00  | 305.56  |
| ENSDARG00000062606 | *si:dkey-26i13.8* | 2445.97  | 1070.11  | 521.35  | 1100.00  |
| ENSDARG00000094514 | *si:dkey-7l6.3* | 571.94  | 182.41  | 119.12  | 227.26  |
| ENSDARG00000057262 | *si:dkey-91i10.3* | 690.60  | 179.60  | 104.44  | 77.34  |
| ENSDARG00000094330 | *si:dkey-9p24.5* | 2876.80  | 1151.50  | 428.99  | 1350.18  |
| ENSDARG00000088881 | *si:dkeyp-69b9.3* | 275.81  | 71.09  | 27.62  | 40.10  |
| ENSDARG00000093322 | *si:dkeyp-87a6.2* | 357.06  | 116.93  | 52.65  | 134.64  |
| ENSDARG00000105383 | *si:zfos-405g10.4* | 2223.61  | 719.33  | 214.93  | 911.89  |
| ENSDARG00000104573 | *slc12a2* | 3978.99  | 1114.08  | 828.64  | 1730.21  |
| ENSDARG00000020984 | *slc16a10* | 2751.72  | 850.29  | 574.87  | 782.03  |
| ENSDARG00000090106 | *slc17a7b* | 256.57  | 11.22  | 9.49  | 11.46  |
| ENSDARG00000003697 | *slc5a8l* | 409.44  | 72.96  | 50.93  | 47.74  |
| ENSDARG00000005894 | *slc7a9* | 377.37  | 64.54  | 60.42  | 56.34  |
| ENSDARG00000075015 | *soul5* | 152.87  | 506.99  | 1355.16  | 1941.24  |
| ENSDARG00000035459 | *spns3* | 747.26  | 53.32  | 62.15  | 62.07  |
| ENSDARG00000103765 | *stpg1* | 1017.73  | 337.68  | 148.46  | 426.82  |
| ENSDARG00000045408 | *tagln* | 3829.32  | 550.02  | 201.98  | 111.72  |
| ENSDARG00000041734 | *tbc1d32* | 1965.97  | 795.10  | 418.63  | 836.46  |
| ENSDARG00000104125 | *ttc6* | 4166.07  | 1759.51  | 788.07  | 1935.51  |
| ENSDARG00000110627 | *zgc:171310* | 196.70  | 46.77  | 25.89  | 43.92  |
| ENSDARG00000110008 | *znf1004* | 70.56  | 7.48  | 3.45  | 7.64  |