**Supplementary materials 1**

**Table 1 Forward and reverse primer pairs.**

|  |  |  |
| --- | --- | --- |
| **Gene names** | **Forward** | **Reverse** |
| Ptprc  Fn1  Tyrobp  Emr1  Itgb2  Itgax  Cd44  CtSS  Ly86  Aif1 | GTGCCCATCAGTTCCTTACA  TCCTGTCTACCTCACAGACTAC  TGTGGTGTCCAGTGCATATC  ATTGCGGGATTCCTACACTATC  TTTACTTGCGACCAGGACAG  GTGCCCATCAGTTCCTTACA  GCAGAAATCAAGACGTTATGGG  GACGCTTCCTATCCCTACAAAG  TGGGTCACTCTTCCGATCTTA  GGAGTTTGATCTGAATGGAAATGG | GTCAGCTCCACAGTTCTTCTC  GTCTACTCCACCGAACAACAA  GACTTAATCCTCCCACAGTCAG  TTCACCACCTTCAGGTTTCTC  GAGGAGAGATCCATGAGGTAGT  GTCAGCTCCACAGTTCTTCTC  AAGCACCACCACCAAAGA  CCAAACGGGAGCTGAATGTA  ACTCAGGGTCCTCAGAAATAGA  TTCAGCTCTAGGTGGGTCTT |

**Table 2 Differentially expressed genes (DEGs).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | FC | pValue | adj.P.Val | t value | Gene Name |
| |  | | --- | | ILMN\_1234487 | | ILMN\_2638914 | | ILMN\_2433119 | | ILMN\_1230039 | | ILMN\_3084087 | | ILMN\_1239102 | | ILMN\_2826916 | | ILMN\_1217978 | | ILMN\_1221817 | | ILMN\_1225835 | | ILMN\_1236393 | | ILMN\_2518744 | | ILMN\_2734729 | | ILMN\_1240846 | | ILMN\_2885990 | | ILMN\_1238215 | | ILMN\_3143483 | | ILMN\_2451022 | | ILMN\_1216953 | | ILMN\_2631423 | | ILMN\_1228314 | | ILMN\_1249498 | | ILMN\_1237224 | | ILMN\_1250421 | | ILMN\_2700848 | | ILMN\_1243407 | | ILMN\_2618408 | | ILMN\_1218123 | | ILMN\_1253370 | | ILMN\_2854943 | | ILMN\_2840430 | | ILMN\_2742152 | | ILMN\_1228031 | | ILMN\_1253304 | | ILMN\_2711267 | | ILMN\_2737713 | | ILMN\_2765224 | | ILMN\_2728270 | | ILMN\_2675760 | | ILMN\_1222452 | | ILMN\_2498731 | | ILMN\_2750053 | | ILMN\_1225699 | | ILMN\_1253178 | | ILMN\_2619983 | | ILMN\_2595200 | | ILMN\_2609998 | | ILMN\_2653132 | | ILMN\_3113303 | | ILMN\_2931918 | | ILMN\_2974798 | | ILMN\_1242170 | | ILMN\_2870522 | | ILMN\_2970473 | | ILMN\_1233424 | | ILMN\_1244316 | | ILMN\_1233127 | | ILMN\_2643470 | | ILMN\_1256369 | | ILMN\_1235390 | | ILMN\_2743013 | | ILMN\_2681516 | | ILMN\_2764580 | | ILMN\_2472741 | | ILMN\_1220170 | | ILMN\_3008858 | | ILMN\_1253813 | | ILMN\_2651715 | | ILMN\_2717439 | | ILMN\_2999439 | | ILMN\_2932964 | | ILMN\_2693205 | | ILMN\_2867147 | | ILMN\_2677231 | | ILMN\_1221199 | | ILMN\_2715802 | | ILMN\_2694955 | | ILMN\_2772077 | | ILMN\_2649333 | | ILMN\_2596396 | | ILMN\_2950422 | | ILMN\_2629395 | | ILMN\_1220234 | | ILMN\_3060766 | | ILMN\_1231814 | | ILMN\_1246861 | | ILMN\_2623983 | | ILMN\_2980663 | | ILMN\_1242427 | | ILMN\_1236718 | | ILMN\_1217849 | | ILMN\_1247377 | | ILMN\_1236188 | | ILMN\_2829262 | | ILMN\_2821916 | | ILMN\_2700408 | | ILMN\_2834379 | | ILMN\_2596346 | | ILMN\_2619620 | | ILMN\_2588515 | | ILMN\_2701321 | | ILMN\_2631161 | | ILMN\_1259418 | | ILMN\_2971721 | | ILMN\_2987862 | | ILMN\_1249378 | | ILMN\_2656422 | | ILMN\_2942674 | | ILMN\_2598103 | | ILMN\_2664224 | | ILMN\_3115796 | | ILMN\_2592881 | | ILMN\_1251390 | | ILMN\_2725927 | | ILMN\_2776431 | | ILMN\_2618364 | | ILMN\_2960308 | | ILMN\_2707017 | | ILMN\_2706730 | | ILMN\_2590961 | | ILMN\_2626359 | | ILMN\_2668536 | | ILMN\_2720836 | | ILMN\_2714796 | | ILMN\_2676022 | | ILMN\_2993221 | | ILMN\_1248367 | | ILMN\_1213449 | | ILMN\_2608133 | | ILMN\_2642681 | | ILMN\_2866856 | | ILMN\_2660851 | | ILMN\_2748875 | | ILMN\_2856588 | | ILMN\_2660099 | | ILMN\_1230287 | | ILMN\_1237375 | | ILMN\_1229573 | | ILMN\_2776922 | | ILMN\_2790188 | | ILMN\_1254692 | | ILMN\_2622500 | | ILMN\_1252481 | | ILMN\_2671923 | | ILMN\_1229155 | | ILMN\_3112334 | | ILMN\_1249486 | | ILMN\_2459899 | | ILMN\_2424060 | | ILMN\_2715840 | | ILMN\_1219017 | | ILMN\_2745876 | | ILMN\_2660555 | | ILMN\_2604029 | | ILMN\_1246486 | | ILMN\_2628629 | | ILMN\_2874853 | | ILMN\_1254256 | | ILMN\_2697433 | | ILMN\_1254927 | | ILMN\_2788593 | | ILMN\_1220939 | | ILMN\_2473620 | | ILMN\_2767615 | | ILMN\_1247947 | | ILMN\_2994744 | | ILMN\_2710159 | | ILMN\_1239239 | | ILMN\_2665535 | | ILMN\_2663211 | | ILMN\_2699488 | | ILMN\_2513570 | | ILMN\_1217021 | | ILMN\_1254577 | | ILMN\_1248139 | | ILMN\_2940642 | | ILMN\_2718662 | | ILMN\_1232716 | | ILMN\_2776008 | | ILMN\_2768972 | | ILMN\_2878071 | | ILMN\_2510694 | | ILMN\_2616226 | | ILMN\_1230890 | | ILMN\_1213850 | | ILMN\_2657478 | | ILMN\_2603725 | | ILMN\_1238644 | | ILMN\_2653385 | | ILMN\_1228320 | | ILMN\_2733185 | | ILMN\_2671572 | | ILMN\_2756704 | | ILMN\_1239729 | | ILMN\_1218949 | | ILMN\_2934120 | | ILMN\_2866185 | | ILMN\_2772595 | | ILMN\_2710274 | | ILMN\_3145415 | | ILMN\_1222602 | | ILMN\_1216880 | | ILMN\_2488360 | | ILMN\_2745425 | | ILMN\_2588682 | | ILMN\_2433213 | | ILMN\_2485526 | | ILMN\_2508679 | | ILMN\_2594031 | | ILMN\_2915232 | | ILMN\_2437254 | | ILMN\_2803674 | | ILMN\_3158250 | | ILMN\_1260456 | | ILMN\_2955919 | | ILMN\_2500533 | | ILMN\_2632712 | | ILMN\_1255834 | | ILMN\_2513960 | | ILMN\_1239430 | | ILMN\_1226395 | | ILMN\_3114585 | | ILMN\_1251634 | | ILMN\_2861787 | | ILMN\_1221067 | | ILMN\_1217389 | | ILMN\_2609323 | | ILMN\_2503553 | | ILMN\_1224077 | | ILMN\_1219946 | | ILMN\_1238603 | | ILMN\_2939681 | | ILMN\_2671056 | | ILMN\_2737685 | | ILMN\_2678127 | | ILMN\_2759309 | | ILMN\_2780280 | | ILMN\_2614966 | | ILMN\_2675232 | | ILMN\_1256142 | | ILMN\_1248441 | | ILMN\_1226619 | | ILMN\_2597769 | | ILMN\_2595664 | | ILMN\_1256676 | | ILMN\_2699531 | | ILMN\_3052632 | | ILMN\_3144575 | | ILMN\_2710419 | | ILMN\_2947526 | | ILMN\_2716935 | | ILMN\_2543393 | | ILMN\_1254031 | | ILMN\_1239386 | | ILMN\_2910934 | | ILMN\_2660263 | | ILMN\_2686975 | | ILMN\_2936118 | | ILMN\_2592253 | | ILMN\_2793817 | | ILMN\_1255739 | | ILMN\_2865335 | | ILMN\_1259400 | | ILMN\_2670713 | | ILMN\_2617433 | | ILMN\_2419146 | | ILMN\_1223257 | | ILMN\_2757125 | | ILMN\_1227458 | | ILMN\_1248994 | | ILMN\_2716185 | | ILMN\_2704619 | | ILMN\_1237186 | | ILMN\_3143604 | | ILMN\_1249637 | | ILMN\_2958464 | | ILMN\_1221048 | | ILMN\_2480682 | | ILMN\_2718217 | | ILMN\_2686327 | | ILMN\_1212836 | | ILMN\_2688894 | | ILMN\_2621752 | | ILMN\_2678580 | | ILMN\_2810882 | | ILMN\_2692723 | | ILMN\_2634235 | | ILMN\_2669062 | | ILMN\_2744164 | | ILMN\_1216871 | | ILMN\_1212702 | | ILMN\_2759159 | | ILMN\_2762528 | | ILMN\_1219978 | | ILMN\_2774121 | | ILMN\_1244291 | | ILMN\_1227907 | | ILMN\_1228654 | | ILMN\_1242661 | | ILMN\_2630459 | | ILMN\_2951691 | | ILMN\_2457571 | | ILMN\_2719139 | | ILMN\_2646618 | | ILMN\_1235158 | | ILMN\_2777498 | | ILMN\_2814974 | | ILMN\_2956092 | | ILMN\_2617228 | | ILMN\_3006219 | | ILMN\_2727172 | | ILMN\_2723108 | | ILMN\_2665441 | | ILMN\_3118707 | | ILMN\_2517041 | | ILMN\_2619107 | | ILMN\_1237038 | | ILMN\_2588244 | | ILMN\_2825574 | | ILMN\_3003864 | | ILMN\_2729958 | | ILMN\_2655024 | | ILMN\_2785454 | | ILMN\_2769490 | | ILMN\_2709211 | | ILMN\_2765741 | | ILMN\_2723639 | | ILMN\_1221146 | | ILMN\_2501489 | | ILMN\_2888834 | | ILMN\_1230357 | | ILMN\_1235619 | | ILMN\_1240938 | | ILMN\_2723305 | | ILMN\_2599192 | | ILMN\_2777034 | | ILMN\_1223317 | | ILMN\_1253659 | | ILMN\_1231012 | | ILMN\_2622374 | | ILMN\_2621448 | | ILMN\_1256989 | | ILMN\_2693991 | | ILMN\_2983525 | | ILMN\_1254276 | | ILMN\_1233989 | | ILMN\_1230157 | | ILMN\_3132898 | | ILMN\_1248830 | | ILMN\_1219574 | | ILMN\_2698449 | | ILMN\_3040069 | | ILMN\_2525565 | | ILMN\_1234223 | | ILMN\_1238276 | | ILMN\_2757966 | | ILMN\_2836654 | | ILMN\_1227951 | | ILMN\_1230708 | | ILMN\_2638017 | | ILMN\_1255416 | | ILMN\_1245246 | | ILMN\_2529842 | | ILMN\_2661971 | | ILMN\_2887986 | | ILMN\_2847144 | | ILMN\_1256476 | | ILMN\_2985128 | | ILMN\_2632034 | | ILMN\_1226839 | | ILMN\_1241892 | | ILMN\_2745370 | | ILMN\_2731901 | | |  | | --- | | 1.99 | | -2.57 | | -1 | | -1.23 | | 1.31 | | 1.88 | | 1.04 | | -1.01 | | 3.09 | | -1.59 | | 1.11 | | -1.25 | | 2.34 | | -1.5 | | -1.39 | | 1.88 | | 2.76 | | 1.07 | | -1.05 | | 2.82 | | -1.25 | | 1.57 | | -1.55 | | 2.07 | | 1.62 | | -2.47 | | -1.4 | | 3.5 | | 1.4 | | -1.23 | | -1.25 | | 1.1 | | -1.46 | | -1.35 | | 1.26 | | 1.01 | | -1.36 | | 1.33 | | -1.27 | | -1.06 | | -1.38 | | -1.25 | | -1.76 | | -2.36 | | -1.05 | | -1.16 | | -1.18 | | 2.31 | | -1.35 | | -1.05 | | 1.15 | | -1.69 | | -1.77 | | 1.08 | | -1 | | 2.58 | | -1.08 | | 1.39 | | -1.37 | | -1.13 | | 1.08 | | 1.56 | | 1.18 | | -1.33 | | -1.08 | | 1.88 | | 1.64 | | 1.36 | | 1.41 | | -1.31 | | 1 | | 1.2 | | 3.08 | | -1.17 | | -1.31 | | 1.05 | | 1.31 | | 1.12 | | -1.36 | | -1.33 | | -1.19 | | -1.25 | | -1.34 | | -1.42 | | 1.91 | | 2.39 | | 1.02 | | -1.31 | | -1.2 | | 2.04 | | 3.4 | | 2.41 | | -1.04 | | -1.11 | | -1.2 | | -1.2 | | 2.13 | | 1.6 | | 2.49 | | -1.04 | | 1.2 | | 1.79 | | -1.04 | | -1.04 | | -1.02 | | -1.2 | | 1.68 | | -1.83 | | -1.6 | | -1.41 | | -1.09 | | -1.89 | | 1.55 | | 1.54 | | 1.56 | | 1.25 | | 1.05 | | -1.1 | | -1.35 | | -1.01 | | -1.11 | | -1.02 | | 1.43 | | 2.13 | | -1.03 | | -1.12 | | -1.56 | | -1.08 | | -2.03 | | 1.08 | | 1.22 | | 1.08 | | 2.09 | | -1.21 | | 1.03 | | 1.25 | | -1.23 | | 1.59 | | 1.21 | | -1.78 | | 1.79 | | -1.08 | | 1.25 | | 1.12 | | 1.04 | | -1.36 | | 2.8 | | -1.41 | | -1.56 | | 1.92 | | -1 | | -1.26 | | 2.26 | | -1.06 | | -1.32 | | 1.1 | | 1.11 | | -1.3 | | -1.05 | | -1.7 | | -1.34 | | -1.02 | | -1.1 | | -1.71 | | -1.32 | | -1.26 | | -1.03 | | -1.3 | | -1.79 | | -1.04 | | -1.54 | | -1.26 | | -1.04 | | 1.4 | | 1.26 | | -1.82 | | 1.17 | | -1.68 | | -1.26 | | -1.67 | | 2.86 | | -2.17 | | -1.62 | | -1.19 | | -1.98 | | 1.87 | | 1.18 | | -1.02 | | 1.18 | | 1.73 | | -1.27 | | 1.04 | | -1.37 | | -1.33 | | -1.54 | | 1.86 | | 1.09 | | 1.05 | | -1.47 | | 1.01 | | 1.21 | | 2.09 | | -1.42 | | 1.28 | | -1.68 | | -1.04 | | -1.36 | | 1.13 | | -1.01 | | 1.66 | | -1.02 | | 2.14 | | 1.1 | | -1.12 | | 1.25 | | -1.36 | | 1.19 | | 1.05 | | -1.59 | | 1.19 | | -1.46 | | 1.02 | | -1.81 | | 1.73 | | 1.08 | | 1.21 | | 1.22 | | 1.87 | | 1.29 | | 1.24 | | -1.49 | | 2.61 | | 1.35 | | 2.51 | | -1.04 | | 1.03 | | -1.06 | | -1.18 | | -2.08 | | 1.86 | | -1.24 | | 1.06 | | -1.37 | | -1.49 | | 1.07 | | 1.84 | | -1.05 | | -1.04 | | -1.31 | | -1.21 | | 1.64 | | 1.39 | | -1.1 | | 1.17 | | 1.71 | | 1.58 | | -1.02 | | 1.14 | | 1.97 | | -1.22 | | 1.49 | | -1.62 | | 1.07 | | 1.28 | | 1.17 | | 1.06 | | 1.15 | | 1.05 | | -1.17 | | -2.01 | | -1.7 | | -1.14 | | 1.64 | | 1.1 | | -1.19 | | 1.36 | | 1.07 | | -1.22 | | 1.28 | | -1.01 | | 1.62 | | 1.2 | | 1.33 | | 1.04 | | 1.16 | | 1.64 | | 1.28 | | -1.76 | | -1.19 | | 1.14 | | 1.45 | | 1.42 | | -1.09 | | -1.07 | | -1.14 | | 2.3 | | 1.14 | | 1.03 | | 1.41 | | 1.42 | | 2.34 | | -1.01 | | 1.1 | | 1.66 | | -1.17 | | 1.62 | | 1.75 | | 1.04 | | 1.1 | | 1.33 | | 1.2 | | -1.36 | | -1.76 | | 1.03 | | 1.37 | | 1.15 | | 1.46 | | 1.27 | | 1.26 | | -1.42 | | 2.1 | | 1.58 | | 1.08 | | 1.07 | | 1.24 | | -1.22 | | -1.1 | | -2.35 | | 1.17 | | 1.35 | | -1.6 | | -1.01 | | -1.21 | | 1.13 | | 1.02 | | 1.4 | | 1.84 | | 1.39 | | 1.26 | | -1.21 | | -1.03 | | 1.24 | | 1.05 | | 1.05 | | 1.17 | | 1.13 | | 1.12 | | -1.05 | | 1.71 | | 1.75 | | 1.32 | | 1.63 | | 1.51 | | 1.21 | | 1.64 | | 1.69 | | 1.95 | | 1.66 | | 1.6 | | -1.06 | | -1.69 | | -1.01 | | -1 | | 1.08 | | 1.24 | | 1.73 | | -1.29 | | 1.38 | | 1.59 | | 1.89 | | -1.26 | | -1.21 | | 1.14 | | |  | | --- | | 1.19E-07 | | 3.08E-07 | | 6.31E-06 | | 1.21E-05 | | 2.51E-05 | | 2.96E-05 | | 4.49E-05 | | 4.72E-05 | | 4.97E-05 | | 6.29E-05 | | 7.08E-05 | | 1.02E-04 | | 1.11E-04 | | 1.13E-04 | | 1.22E-04 | | 1.22E-04 | | 1.24E-04 | | 1.33E-04 | | 1.34E-04 | | 1.38E-04 | | 1.48E-04 | | 1.98E-04 | | 1.98E-04 | | 2.07E-04 | | 2.38E-04 | | 2.42E-04 | | 2.49E-04 | | 2.64E-04 | | 2.72E-04 | | 3.07E-04 | | 3.12E-04 | | 3.42E-04 | | 3.65E-04 | | 4.09E-04 | | 4.61E-04 | | 4.68E-04 | | 4.75E-04 | | 4.95E-04 | | 5.69E-04 | | 5.75E-04 | | 6.04E-04 | | 6.14E-04 | | 6.20E-04 | | 6.93E-04 | | 7.13E-04 | | 7.29E-04 | | 7.40E-04 | | 7.42E-04 | | 7.66E-04 | | 7.81E-04 | | 8.00E-04 | | 8.21E-04 | | 9.32E-04 | | 9.33E-04 | | 9.37E-04 | | 1.00E-03 | | 1.01E-03 | | 1.05E-03 | | 1.13E-03 | | 1.13E-03 | | 1.15E-03 | | 1.16E-03 | | 1.17E-03 | | 1.17E-03 | | 1.23E-03 | | 1.28E-03 | | 1.28E-03 | | 1.33E-03 | | 1.33E-03 | | 1.37E-03 | | 1.44E-03 | | 1.50E-03 | | 1.52E-03 | | 1.55E-03 | | 1.56E-03 | | 1.57E-03 | | 1.69E-03 | | 1.69E-03 | | 1.71E-03 | | 1.72E-03 | | 1.76E-03 | | 1.78E-03 | | 1.85E-03 | | 1.89E-03 | | 1.90E-03 | | 1.96E-03 | | 2.04E-03 | | 2.07E-03 | | 2.11E-03 | | 2.31E-03 | | 2.34E-03 | | 2.38E-03 | | 2.57E-03 | | 2.67E-03 | | 2.75E-03 | | 2.78E-03 | | 2.78E-03 | | 2.86E-03 | | 3.05E-03 | | 3.05E-03 | | 3.09E-03 | | 3.27E-03 | | 3.31E-03 | | 3.44E-03 | | 3.46E-03 | | 3.49E-03 | | 3.50E-03 | | 3.62E-03 | | 3.71E-03 | | 3.82E-03 | | 3.88E-03 | | 4.06E-03 | | 4.10E-03 | | 4.18E-03 | | 4.21E-03 | | 4.22E-03 | | 4.35E-03 | | 4.36E-03 | | 4.61E-03 | | 4.66E-03 | | 4.74E-03 | | 4.77E-03 | | 4.89E-03 | | 5.10E-03 | | 5.18E-03 | | 5.20E-03 | | 5.23E-03 | | 5.38E-03 | | 5.55E-03 | | 5.65E-03 | | 5.93E-03 | | 6.03E-03 | | 6.09E-03 | | 6.14E-03 | | 6.18E-03 | | 6.18E-03 | | 6.52E-03 | | 6.62E-03 | | 6.64E-03 | | 6.69E-03 | | 6.90E-03 | | 6.99E-03 | | 7.06E-03 | | 7.25E-03 | | 7.38E-03 | | 7.51E-03 | | 7.54E-03 | | 7.56E-03 | | 7.58E-03 | | 7.67E-03 | | 7.74E-03 | | 7.88E-03 | | 7.94E-03 | | 7.96E-03 | | 7.97E-03 | | 8.03E-03 | | 8.06E-03 | | 8.85E-03 | | 9.25E-03 | | 9.34E-03 | | 9.40E-03 | | 9.50E-03 | | 9.53E-03 | | 9.66E-03 | | 9.69E-03 | | 9.81E-03 | | 9.85E-03 | | 9.86E-03 | | 9.90E-03 | | 9.92E-03 | | 9.93E-03 | | 1.00E-02 | | 1.00E-02 | | 1.01E-02 | | 1.02E-02 | | 1.05E-02 | | 1.05E-02 | | 1.06E-02 | | 1.06E-02 | | 1.07E-02 | | 1.08E-02 | | 1.09E-02 | | 1.12E-02 | | 1.13E-02 | | 1.15E-02 | | 1.15E-02 | | 1.17E-02 | | 1.18E-02 | | 1.19E-02 | | 1.19E-02 | | 1.20E-02 | | 1.23E-02 | | 1.23E-02 | | 1.23E-02 | | 1.24E-02 | | 1.24E-02 | | 1.24E-02 | | 1.25E-02 | | 1.25E-02 | | 1.26E-02 | | 1.27E-02 | | 1.27E-02 | | 1.29E-02 | | 1.30E-02 | | 1.30E-02 | | 1.30E-02 | | 1.31E-02 | | 1.31E-02 | | 1.32E-02 | | 1.34E-02 | | 1.35E-02 | | 1.37E-02 | | 1.40E-02 | | 1.41E-02 | | 1.44E-02 | | 1.46E-02 | | 1.46E-02 | | 1.47E-02 | | 1.47E-02 | | 1.47E-02 | | 1.49E-02 | | 1.51E-02 | | 1.52E-02 | | 1.52E-02 | | 1.54E-02 | | 1.55E-02 | | 1.57E-02 | | 1.58E-02 | | 1.60E-02 | | 1.61E-02 | | 1.61E-02 | | 1.62E-02 | | 1.63E-02 | | 1.64E-02 | | 1.65E-02 | | 1.67E-02 | | 1.67E-02 | | 1.68E-02 | | 1.69E-02 | | 1.72E-02 | | 1.73E-02 | | 1.73E-02 | | 1.73E-02 | | 1.78E-02 | | 1.78E-02 | | 1.80E-02 | | 1.81E-02 | | 1.81E-02 | | 1.81E-02 | | 1.82E-02 | | 1.83E-02 | | 1.84E-02 | | 1.86E-02 | | 1.87E-02 | | 1.88E-02 | | 1.88E-02 | | 1.89E-02 | | 1.93E-02 | | 1.93E-02 | | 1.94E-02 | | 1.99E-02 | | 2.01E-02 | | 2.01E-02 | | 2.02E-02 | | 2.02E-02 | | 2.03E-02 | | 2.05E-02 | | 2.06E-02 | | 2.09E-02 | | 2.14E-02 | | 2.16E-02 | | 2.19E-02 | | 2.22E-02 | | 2.24E-02 | | 2.29E-02 | | 2.32E-02 | | 2.33E-02 | | 2.35E-02 | | 2.36E-02 | | 2.38E-02 | | 2.39E-02 | | 2.42E-02 | | 2.46E-02 | | 2.46E-02 | | 2.49E-02 | | 2.54E-02 | | 2.54E-02 | | 2.55E-02 | | 2.56E-02 | | 2.58E-02 | | 2.61E-02 | | 2.61E-02 | | 2.63E-02 | | 2.63E-02 | | 2.65E-02 | | 2.76E-02 | | 2.76E-02 | | 2.77E-02 | | 2.79E-02 | | 2.86E-02 | | 2.90E-02 | | 2.90E-02 | | 2.91E-02 | | 2.96E-02 | | 2.97E-02 | | 3.01E-02 | | 3.01E-02 | | 3.14E-02 | | 3.14E-02 | | 3.19E-02 | | 3.23E-02 | | 3.24E-02 | | 3.25E-02 | | 3.29E-02 | | 3.30E-02 | | 3.32E-02 | | 3.33E-02 | | 3.33E-02 | | 3.34E-02 | | 3.38E-02 | | 3.39E-02 | | 3.41E-02 | | 3.45E-02 | | 3.45E-02 | | 3.46E-02 | | 3.57E-02 | | 3.58E-02 | | 3.59E-02 | | 3.70E-02 | | 3.71E-02 | | 3.72E-02 | | 3.72E-02 | | 3.73E-02 | | 3.73E-02 | | 3.80E-02 | | 3.82E-02 | | 3.86E-02 | | 3.87E-02 | | 3.95E-02 | | 3.96E-02 | | 3.97E-02 | | 4.00E-02 | | 4.02E-02 | | 4.03E-02 | | 4.08E-02 | | 4.13E-02 | | 4.15E-02 | | 4.21E-02 | | 4.25E-02 | | 4.36E-02 | | 4.39E-02 | | 4.42E-02 | | 4.43E-02 | | 4.46E-02 | | 4.54E-02 | | 4.56E-02 | | 4.57E-02 | | 4.64E-02 | | 4.68E-02 | | 4.75E-02 | | 4.79E-02 | | 4.81E-02 | | 4.82E-02 | | 4.83E-02 | | 4.84E-02 | | 4.84E-02 | | 4.86E-02 | | 4.86E-02 | | 4.89E-02 | | 4.93E-02 | | 4.96E-02 | | 4.98E-02 | | 4.98E-02 | | |  | | --- | | 0.00367 | | 0.00465 | | 0.05223 | | 0.05223 | | 0.05296 | | 0.05328 | | 0.06092 | | 0.06092 | | 0.06092 | | 0.06407 | | 0.06407 | | 0.06463 | | 0.06463 | | 0.06463 | | 0.06555 | | 0.06555 | | 0.06555 | | 0.06555 | | 0.06555 | | 0.06555 | | 0.06607 | | 0.06758 | | 0.06758 | | 0.06994 | | 0.0719 | | 0.07205 | | 0.07332 | | 0.0746 | | 0.0746 | | 0.07752 | | 0.07752 | | 0.07966 | | 0.08032 | | 0.0831 | | 0.08491 | | 0.08515 | | 0.08555 | | 0.08555 | | 0.08912 | | 0.08912 | | 0.08912 | | 0.08912 | | 0.08939 | | 0.09225 | | 0.09363 | | 0.09412 | | 0.09462 | | 0.09462 | | 0.09486 | | 0.09511 | | 0.09588 | | 0.09652 | | 0.0992 | | 0.0992 | | 0.09921 | | 0.10152 | | 0.10152 | | 0.10205 | | 0.10555 | | 0.10563 | | 0.10679 | | 0.10704 | | 0.10704 | | 0.10704 | | 0.1078 | | 0.10802 | | 0.10802 | | 0.10874 | | 0.10874 | | 0.10908 | | 0.1116 | | 0.11287 | | 0.11306 | | 0.11315 | | 0.11315 | | 0.11345 | | 0.11753 | | 0.11753 | | 0.11759 | | 0.11759 | | 0.11759 | | 0.11774 | | 0.11806 | | 0.11806 | | 0.11806 | | 0.11885 | | 0.12078 | | 0.12162 | | 0.12318 | | 0.12687 | | 0.12712 | | 0.12812 | | 0.13294 | | 0.13545 | | 0.13675 | | 0.13693 | | 0.13693 | | 0.13777 | | 0.14142 | | 0.14142 | | 0.1423 | | 0.14653 | | 0.14702 | | 0.1503 | | 0.15083 | | 0.1515 | | 0.15168 | | 0.15325 | | 0.15468 | | 0.1568 | | 0.15719 | | 0.15959 | | 0.15979 | | 0.16022 | | 0.16022 | | 0.16023 | | 0.16168 | | 0.16168 | | 0.16581 | | 0.16609 | | 0.16738 | | 0.16752 | | 0.16881 | | 0.17071 | | 0.17124 | | 0.17131 | | 0.17165 | | 0.17351 | | 0.1736 | | 0.17555 | | 0.17727 | | 0.17812 | | 0.17874 | | 0.17929 | | 0.17959 | | 0.17959 | | 0.1834 | | 0.18454 | | 0.18476 | | 0.18515 | | 0.18646 | | 0.18731 | | 0.18828 | | 0.18992 | | 0.19158 | | 0.19222 | | 0.19222 | | 0.19222 | | 0.19223 | | 0.1932 | | 0.19395 | | 0.19555 | | 0.19632 | | 0.19681 | | 0.19682 | | 0.19748 | | 0.19748 | | 0.20544 | | 0.20907 | | 0.20992 | | 0.21071 | | 0.21163 | | 0.21185 | | 0.21235 | | 0.21253 | | 0.21322 | | 0.21331 | | 0.21331 | | 0.21331 | | 0.21331 | | 0.21334 | | 0.21425 | | 0.21425 | | 0.21468 | | 0.21546 | | 0.2175 | | 0.2178 | | 0.21839 | | 0.21839 | | 0.21927 | | 0.21953 | | 0.22012 | | 0.22152 | | 0.22263 | | 0.22349 | | 0.22349 | | 0.22525 | | 0.22525 | | 0.22603 | | 0.22603 | | 0.22612 | | 0.22775 | | 0.22777 | | 0.22777 | | 0.22779 | | 0.22779 | | 0.22779 | | 0.22779 | | 0.22781 | | 0.22837 | | 0.22904 | | 0.22904 | | 0.2306 | | 0.23085 | | 0.23085 | | 0.23085 | | 0.23181 | | 0.2323 | | 0.23254 | | 0.23395 | | 0.23448 | | 0.23547 | | 0.23682 | | 0.23754 | | 0.23883 | | 0.24006 | | 0.24012 | | 0.24056 | | 0.2407 | | 0.2407 | | 0.24172 | | 0.24247 | | 0.24255 | | 0.24263 | | 0.24278 | | 0.24367 | | 0.24409 | | 0.24592 | | 0.24667 | | 0.24755 | | 0.24755 | | 0.24782 | | 0.24785 | | 0.24785 | | 0.24904 | | 0.25016 | | 0.25049 | | 0.2507 | | 0.2507 | | 0.25186 | | 0.2521 | | 0.2521 | | 0.2521 | | 0.25398 | | 0.25407 | | 0.25537 | | 0.25568 | | 0.25568 | | 0.25569 | | 0.25631 | | 0.2565 | | 0.25658 | | 0.2583 | | 0.25869 | | 0.25887 | | 0.25887 | | 0.25937 | | 0.26145 | | 0.26145 | | 0.26174 | | 0.26507 | | 0.26546 | | 0.26546 | | 0.2659 | | 0.26618 | | 0.26635 | | 0.26759 | | 0.26759 | | 0.26845 | | 0.26987 | | 0.27082 | | 0.27189 | | 0.27329 | | 0.27413 | | 0.27669 | | 0.27845 | | 0.27845 | | 0.27915 | | 0.27964 | | 0.28092 | | 0.28115 | | 0.28259 | | 0.28437 | | 0.28477 | | 0.28546 | | 0.28689 | | 0.28689 | | 0.28733 | | 0.28733 | | 0.28895 | | 0.28992 | | 0.28992 | | 0.29087 | | 0.29087 | | 0.29174 | | 0.29641 | | 0.29683 | | 0.29695 | | 0.29747 | | 0.30064 | | 0.30232 | | 0.30256 | | 0.30259 | | 0.30521 | | 0.30521 | | 0.30751 | | 0.30751 | | 0.31236 | | 0.31241 | | 0.31421 | | 0.31544 | | 0.31577 | | 0.31591 | | 0.31733 | | 0.31774 | | 0.31812 | | 0.31836 | | 0.31841 | | 0.31865 | | 0.32037 | | 0.32062 | | 0.32117 | | 0.32243 | | 0.32284 | | 0.32284 | | 0.32574 | | 0.32574 | | 0.32592 | | 0.32901 | | 0.32901 | | 0.32929 | | 0.32935 | | 0.32946 | | 0.32946 | | 0.33162 | | 0.33237 | | 0.33308 | | 0.33312 | | 0.33614 | | 0.33624 | | 0.33671 | | 0.33762 | | 0.33807 | | 0.33856 | | 0.34016 | | 0.34122 | | 0.34177 | | 0.34393 | | 0.3447 | | 0.34767 | | 0.34825 | | 0.34895 | | 0.34923 | | 0.34998 | | 0.35213 | | 0.3526 | | 0.35281 | | 0.35467 | | 0.35558 | | 0.35784 | | 0.35866 | | 0.35936 | | 0.35971 | | 0.35984 | | 0.35988 | | 0.35988 | | 0.36032 | | 0.36032 | | 0.3611 | | 0.36202 | | 0.36244 | | 0.36277 | | 0.36295 | | |  | | --- | | 3.55E+01 | | ###### | | ###### | | ###### | | 1.31E+1 | | 1.27E+1 | | 1.18E+01 | | ####### | | 1.15E+01 | | ####### | | 1.08E+01 | | ####### | | 9.89 | | -9.86 | | -9.71 | | 9.71 | | 9.68 | | 9.55 | | -9.54 | | 9.48 | | -9.36 | | 8.85 | | -8.84 | | 8.77 | | 8.53 | | -8.51 | | -8.46 | | 8.36 | | 8.31 | | -8.12 | | -8.09 | | 7.94 | | -7.84 | | -7.67 | | 7.49 | | 7.47 | | -7.44 | | 7.38 | | -7.18 | | -7.17 | | -7.1 | | -7.07 | | -7.06 | | -6.9 | | -6.86 | | -6.83 | | -6.81 | | 6.81 | | -6.76 | | -6.74 | | 6.7 | | -6.67 | | -6.5 | | 6.5 | | -6.49 | | 6.4 | | -6.4 | | 6.34 | | -6.25 | | -6.25 | | 6.23 | | 6.22 | | 6.2 | | -6.2 | | -6.14 | | 6.09 | | 6.08 | | 6.04 | | 6.04 | | -6 | | 5.94 | | 5.89 | | 5.88 | | -5.85 | | -5.84 | | 5.84 | | 5.75 | | 5.74 | | -5.73 | | -5.73 | | -5.7 | | -5.69 | | -5.64 | | -5.61 | | 5.61 | | 5.57 | | 5.53 | | -5.51 | | -5.48 | | 5.38 | | 5.36 | | 5.34 | | -5.26 | | -5.21 | | -5.18 | | -5.17 | | 5.17 | | 5.14 | | 5.07 | | -5.07 | | 5.05 | | 4.99 | | -4.98 | | -4.94 | | -4.93 | | -4.92 | | 4.92 | | -4.88 | | -4.86 | | -4.82 | | -4.81 | | -4.76 | | 4.75 | | 4.73 | | 4.72 | | 4.72 | | 4.69 | | -4.69 | | -4.63 | | -4.62 | | -4.6 | | -4.59 | | 4.57 | | 4.52 | | -4.51 | | -4.5 | | -4.5 | | -4.47 | | -4.44 | | 4.42 | | 4.37 | | 4.35 | | 4.35 | | -4.34 | | 4.33 | | 4.33 | | -4.28 | | 4.26 | | 4.26 | | -4.25 | | 4.22 | | -4.21 | | 4.2 | | 4.17 | | 4.16 | | -4.14 | | 4.14 | | -4.13 | | -4.13 | | 4.12 | | -4.11 | | -4.09 | | 4.09 | | -4.08 | | -4.08 | | 4.08 | | 4.07 | | -3.98 | | -3.94 | | -3.93 | | -3.93 | | -3.92 | | -3.91 | | -3.9 | | -3.9 | | -3.89 | | -3.88 | | -3.88 | | -3.88 | | -3.88 | | -3.88 | | -3.87 | | -3.87 | | 3.86 | | 3.85 | | -3.83 | | 3.82 | | -3.82 | | -3.82 | | -3.81 | | 3.8 | | -3.79 | | -3.77 | | -3.75 | | -3.74 | | 3.74 | | 3.72 | | -3.72 | | 3.71 | | 3.71 | | -3.7 | | 3.68 | | -3.68 | | -3.68 | | -3.67 | | 3.67 | | 3.67 | | 3.67 | | -3.66 | | 3.66 | | 3.65 | | 3.65 | | -3.64 | | 3.63 | | -3.63 | | -3.63 | | -3.63 | | 3.62 | | -3.62 | | 3.61 | | -3.6 | | 3.58 | | 3.57 | | -3.56 | | 3.54 | | -3.53 | | 3.53 | | 3.52 | | -3.52 | | 3.52 | | -3.51 | | 3.5 | | -3.49 | | 3.49 | | 3.48 | | 3.47 | | 3.47 | | 3.46 | | 3.45 | | 3.44 | | -3.44 | | 3.43 | | 3.43 | | 3.43 | | -3.42 | | 3.41 | | -3.41 | | -3.4 | | -3.4 | | 3.38 | | -3.38 | | 3.38 | | -3.38 | | -3.36 | | 3.35 | | 3.34 | | -3.34 | | -3.34 | | -3.34 | | -3.34 | | 3.33 | | 3.33 | | -3.31 | | 3.31 | | 3.31 | | 3.31 | | -3.3 | | 3.28 | | 3.28 | | -3.28 | | 3.26 | | -3.25 | | 3.25 | | 3.25 | | 3.24 | | 3.24 | | 3.23 | | 3.23 | | -3.22 | | -3.2 | | -3.19 | | -3.18 | | 3.16 | | 3.16 | | -3.14 | | 3.13 | | 3.13 | | -3.12 | | 3.11 | | -3.11 | | 3.1 | | 3.09 | | 3.08 | | 3.08 | | 3.07 | | 3.05 | | 3.05 | | -3.05 | | -3.05 | | 3.04 | | 3.03 | | 3.03 | | -3.03 | | -3.03 | | -3.02 | | 2.99 | | 2.98 | | 2.98 | | 2.98 | | 2.95 | | 2.95 | | -2.94 | | 2.94 | | 2.93 | | -2.93 | | 2.91 | | 2.91 | | 2.88 | | 2.88 | | 2.87 | | 2.86 | | -2.85 | | -2.85 | | 2.84 | | 2.84 | | 2.83 | | 2.83 | | 2.83 | | 2.83 | | -2.82 | | 2.82 | | 2.81 | | 2.8 | | 2.8 | | 2.8 | | -2.77 | | -2.77 | | -2.77 | | 2.75 | | 2.75 | | -2.74 | | -2.74 | | -2.74 | | 2.74 | | 2.73 | | 2.72 | | 2.71 | | 2.71 | | 2.69 | | -2.69 | | -2.69 | | 2.68 | | 2.68 | | 2.68 | | 2.67 | | 2.66 | | 2.66 | | -2.64 | | 2.64 | | 2.62 | | 2.61 | | 2.61 | | 2.6 | | 2.6 | | 2.58 | | 2.58 | | 2.58 | | 2.57 | | 2.56 | | -2.55 | | -2.54 | | -2.54 | | -2.54 | | 2.54 | | 2.53 | | 2.53 | | -2.53 | | 2.53 | | 2.53 | | 2.52 | | -2.51 | | -2.51 | | 2.51 | | |  | | --- | | Angpt2 | | Prrt4 | | Syt7 | | Hyal2 | | Ivns1abp | | H2-Eb1 | | Ptpre | | Hoxa5 | | Cd74 | | Mfap5 | | Cd180 | | Wnk4 | | H2-Aa | | Fndc1 | | Pdlim3 | | Ctgf | | Lat2 | | Vim | | Prmt2 | | H2-Ab1 | | Col4a4 | | Plek | | Kctd12 | | Mmp12 | | Arrb2 | | Klk10 | | Icam2 | | Aif1 | | Arhgap20 | | Gprc5a | | Fam20a | | Gadd45a | | Dusp8 | | Stmn2 | | Krt18 | | Edn1 | | Bcam | | B4galnt1 | | Slc52a3 | | Itpr2 | | Eln | | Ptprj | | Serpina1a | | Aldh3a1 | | Sdc2 | | Cxx1a | | Fxyd6 | | Clec7a | | Atp2b2 | | Nxpe2 | | Lamc1 | | Adra2a | | Plekha6 | | Npm1 | | Arhgef2 | | Hbb-bs | | Rfwd2 | | Depdc7 | | Lynx1 | | Calcrl | | Ncf4 | | Slc39a6 | | Parvg | | Tpbgl | | Tek | | Ctsc | | Nckap1l | | Axl | | Pip4k2a | | Klf4 | | Ctps | | Aspm | | Tyrobp | | Hist1h2bc | | Ppm1f | | Hmga1 | | Igfbp4 | | Bok | | Rps6kl1 | | Grasp | | Tppp | | Rhoq | | Serpina1e | | Atl2 | | Ccl5 | | Ctss | | Egr2 | | Aqp1 | | Itga9 | | Hbb-bt | | Laptm5 | | Mpeg1 | | Twist1 | | Ltbp4 | | Nicn1 | | Mgll | | Tgfbi | | Dcn | | C1qb | | Phf1 | | Dusp6 | | Fcgr4 | | Aifm2 | | Fbrsl1 | | Per2 | | Bhlhe40 | | BC028528 | | Lims2 | | Emp2 | | Ephx1 | | Cd40 | | Jam2 | | Tbxas1 | | Serpina3g | | C1qa | | Flnc | | Hspe1 | | Sec14l2 | | Ptprr | | Hadh | | Cds2 | | Efcab14 | | Rbm47 | | Coro1a | | Kitl | | Slc4a4 | | Abat | | Man2c1 | | Rhpn2 | | Atf4 | | H2-DMa | | Bcl10 | | Fcer1g | | Gkn3 | | Slc25a5 | | Cd300ld | | Scd1 | | Neurl3 | | Glrx | | Fam135a | | Ms4a6b | | Zbtb7c | | Fosl2 | | Ly86 | | Sele | | Pitpnm3 | | Clec10a | | Adamtsl4 | | Ace | | C1qc | | Dusp3 | | Ccm2l | | Bcl2a1d | | Klf2 | | Kcnt2 | | Cdh1 | | Eef1b2 | | Actl6a | | Tmem184b | | Ly6c1 | | Nos3 | | Epb41l4a | | Clip1 | | Atp1b1 | | Sqrdl | | Rrm2b | | Plac9a | | Ptgs1 | | Spon1 | | Stbd1 | | Lamb2 | | Rassf8 | | Sfxn3 | | AI607873 | | Lilr4b | | St6galnac2 | | Myl9 | | Cyp1b1 | | Gstk1 | | Fam107a | | Lyz1 | | Nme7 | | Dbp | | Fmo5 | | Col4a3 | | Cd53 | | Arpc3 | | Marveld1 | | Nrg1 | | Cfp | | Cdc42ep3 | | Smad1 | | Parm1 | | Kif1b | | Mterf4 | | Hist2h3b | | Btg1 | | Fgr | | Slc9a3r2 | | Cstf3 | | Mlec | | Adgre1 | | Ski | | Rcc1 | | Aph1b | | Klf7 | | Klf12 | | Cald1 | | Nrbp2 | | Cotl1 | | Fhl1 | | S100a9 | | Cxcl12 | | Hsd3b7 | | Mcam | | Amigo2 | | Birc5 | | Stk17b | | Car8 | | Mrc1 | | Nod2 | | Cd44 | | Gria3 | | Vmp1 | | Nme1 | | Pkib | | Lst1 | | Col8a1 | | Vav1 | | Il10ra | | Pcolce2 | | Lyz2 | | Lilrb4a | | Mmp13 | | Rnf144a | | Rnase6 | | Klk11 | | Rab27a | | Klk8 | | Marcks | | Hdgfrp3 | | Mndal | | Igf2 | | Dhh | | Ddah1 | | Rgs10 | | Epas1 | | Itgb4 | | Plec | | Ecm1 | | Cybb | | Cdca8 | | Klf9 | | Galnt15 | | Cd52 | | Bcl2a1b | | Fam129b | | Rpl24 | | Hist1h3h | | Cldn15 | | Cd300ld3 | | Krt80 | | Prr33 | | Cyfip2 | | Actb | | Ugt1a10 | | Ccl4 | | Prc1 | | Nuak1 | | Cmip | | Lsr | | Cc2d2a | | Spint1 | | Gng2 | | Peg13 | | Slc43a2 | | Psat1 | | Sgms1 | | Tubb6 | | Gas6 | | Ptprc | | Plbd1 | | Irf5 | | Cers6 | | Ppic | | Lpl | | Nrros | | Pi16 | | Tns2 | | Lcp1 | | Hba-a1 | | Hist1h4a | | Bmx | | Appl2 | | Meis2 | | Gja1 | | Gmfg | | Zwint | | Itgb2 | | Cxcr4 | | Hist1h3e | | Maml2 | | AB124611 | | Fn1 | | Sos2 | | Il1b | | Klra2 | | Rassf4 | | Aurka | | Fyb | | Itgax | | Tsc22d1 | | Myrip | | Sla | | Uhrf1 | | Lgals1 | | Fam105a | | Hist1h4c | | Tubb2b | | Cgnl1 | | Hist1h3d | | Il17ra | | Hist2h2ab | | Rab7b | | C3ar1 | | Mxi1 | | Pacs1 | | Cytl1 | | Was | | Apobr | | Itpr1 | | Wasf2 | | Mfsd6 | | Ankle1 | | Siglece | | Adgre4 | | Lgals3 | | Lamb1 | | Lcp2 | | Ndn | | Adh7 | | Hist1h4j | | Gpr65 | | Fam49a | | Hist2h2ac | | Cks1b | | Rnd3 | | Ypel3 | | Hist1h2an | | Hist1h2af | | Hbegf | | Hist2h3c1 | | Hist1h4f | | Pld4 | | Hist1h2ai | | Pf4 | | Hist1h2ap | | Gcnt2 | | Clec4a1 | | Atp2a3 | | Ly6a | | Peg3 | | AU021092 | | Gm2a | | Cd300a | | Hist1h2ak | | Perp | | Hist4h4 | | Dnah11 | | Hist1h2ad | | Sod3 | | Sult1a1 | | S100a4 | |

**Table 3 GO（BP）enrichment analysis.**

|  |  |  |
| --- | --- | --- |
| GO term | Count | PValue |
| |  | | --- | | GO:0002376~immune system process | | GO:0032776~DNA methylation on cytosine | | GO:0007155~cell adhesion | | GO:0006335~DNA replication-dependent nucleosome assembly | | GO:0045815~positive regulation of gene expression, epigenetic | | GO:0051290~protein heterotetramerization | | GO:0045766~positive regulation of angiogenesis | | GO:0006334~nucleosome assembly | | GO:0000183~chromatin silencing at rDNA | | GO:0006954~inflammatory response | | |  | | --- | | 31 | | 11 | | 32 | | 10 | | 10 | | 10 | | 14 | | 13 | | 10 | | 22 | | |  | | --- | | 4.74E-11 | | 2.23E-10 | | 3.35E-09 | | 7.03E-09 | | 7.03E-09 | | 1.97E-07 | | 4.78E-07 | | 6.09E-07 | | 8.04E-07 | | 2.57E-06 | |

**Table 4 GO (CC) enrichment analysis.**

|  |  |  |
| --- | --- | --- |
| GO term | Count | P Value |
| |  | | --- | | GO:0070062~extracellular exosome | | GO:0000786~nucleosome | | GO:0031012~extracellular matrix | | GO:0016020~membrane | | GO:0000228~nuclear chromosome | | GO:0005615~extracellular space | | GO:0005578~proteinaceous extracellular matrix | | GO:0009986~cell surface | | GO:0005576~extracellular region | | GO:0005925~focal adhesion | | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 123 | | 19 | | 27 | | 180 | | 11 | | 57 | | 21 | | 31 | | 60 | | 23 | | | |  | | --- | | 1.56E-23 | | 9.93E-13 | | 3.38E-11 | | 1.24E-08 | | 3.44E-08 | | 2.26E-07 | | 1.55E-06 | | 1.71E-06 | | 2.84E-06 | | 3.24E-06 | |

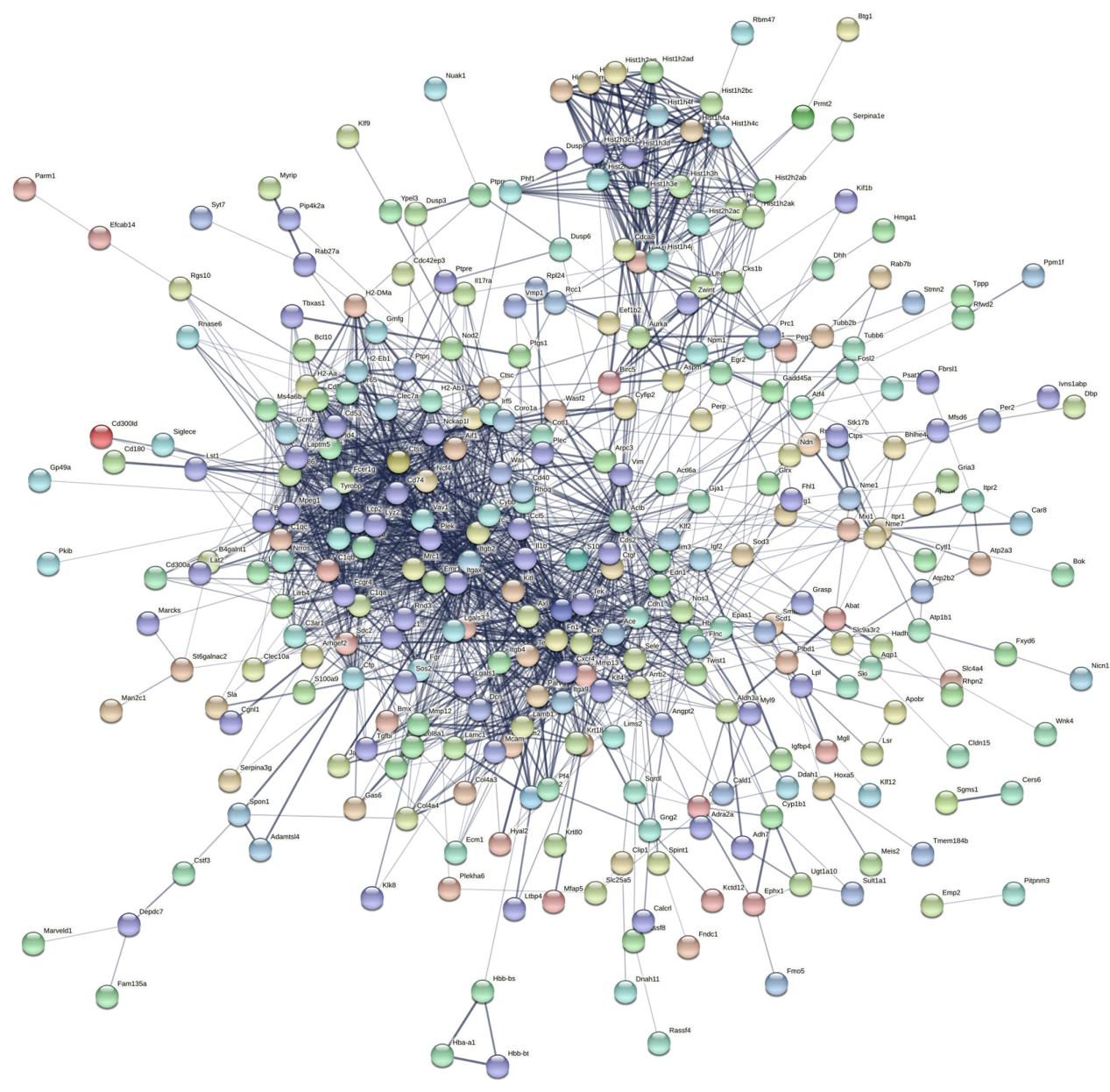
**Table 5 GO (MF) enrichment analysis.**

|  |  |  |
| --- | --- | --- |
| GO term | Count | P Value |
| |  | | --- | | GO:0005515~protein binding | | GO:0042393~histone binding | | GO:0031492~nucleosomal DNA binding | | GO:0019901~protein kinase binding | | GO:0043236~laminin binding | | GO:0046982~protein heterodimerization activity | | GO:0003779~actin binding | | GO:0019899~enzyme binding | | GO:0030246~carbohydrate binding | | GO:0031720~haptoglobin binding | | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 123 | | 14 | | 8 | | 22 | | 6 | | 24 | | 18 | | 19 | | 13 | | 3 | | | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 1.23E-08 | | 6.10E-07 | | 1.01E-05 | | 7.84E-05 | | 1.08E-04 | | 1.18E-04 | | 2.39E-04 | | 3.74E-04 | | 0.001373 | | 0.002062 | | |

**Table 6 KEGG pathway enrichment analysis.**

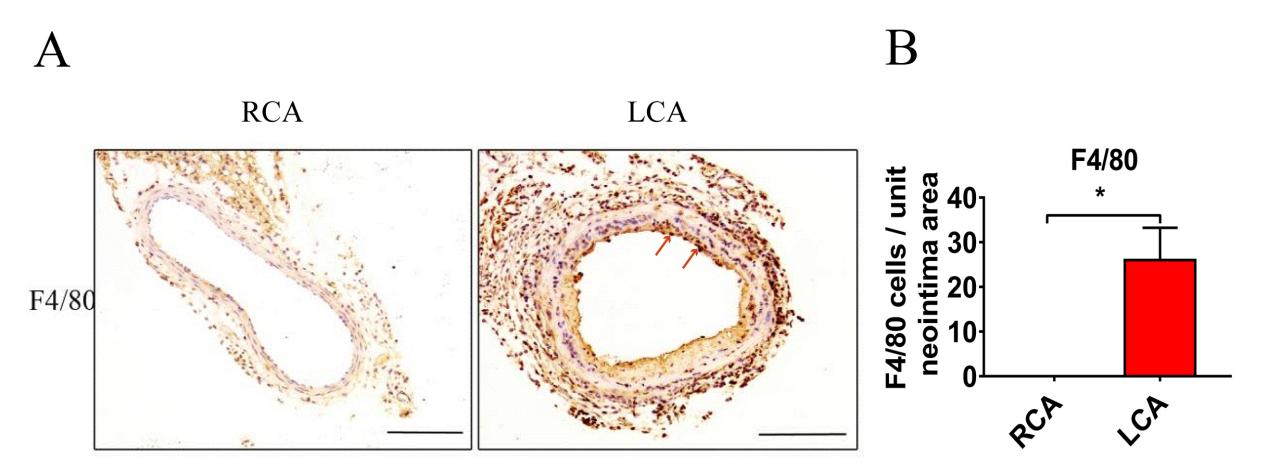
|  |  |  |
| --- | --- | --- |
| KEGG term | Count | P Value |
| |  | | --- | | mmu05322:Systemic lupus erythematosus | | mmu05034:Alcoholism | | mmu05150:Staphylococcus aureus infection | | mmu05152:Tuberculosis | | mmu04145:Phagosome | | mmu05144:Malaria | | mmu04514:Cell adhesion molecules (CAMs) | | mmu05310:Asthma | | mmu04672:Intestinal immune network for IgA production | | mmu04810:Regulation of actin cytoskeleton | | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 29 | | 23 | | 10 | | 17 | | 15 | | 8 | | 14 | | 6 | | 7 | | 15 | | | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 1.34E-17 | | 4.74E-09 | | 3.23E-06 | | 7.38E-06 | | 8.84E-05 | | 1.68E-04 | | 1.94E-04 | | 2.66E-04 | | 5.55E-04 | | 8.57E-04 | | | |

**Figure S1. Protein–protein interaction networks of differentially expressed genes.**



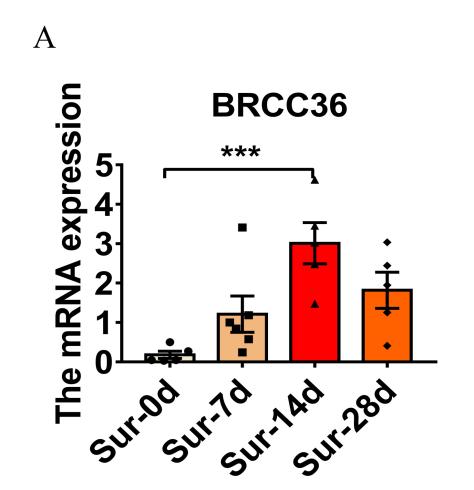
Circles represent genes, lines represent interactions between geneencoded proteins and line colors represent evidence of interactions between proteins.

**Figure S2 Expression of F4/80 protein in the carotid artery 7 days after ligation by immunohistochemistry.**



1. **B)** Immunohistochemistry staining and quantitative analysis of F4/80 protein of carotid artery tissues. The arteries were harvested from uninjured RCA (that underwent a sham operation) and injured LCA at 7 days after surgery. The red arrows represent positive cells. Two-tailed unpaired Student’s t-test is used to compare two groups. Data are expressed as means ±SEM. n=3. \*, *P*＜0.05; compared with the RCA group. Original magnification, 100x. Scale bar: 50 μm.

**Figure S3 Changes in the expression of BRCC36 mRNA over time.**

****

The expression changes of BRCC36 mRNA levels in mouse carotid arteries at 0 days, 7 days, 14 days and 28 days after ligation. All values have been standardized by GAPDH. Two-tailed unpaired Student’s t-test is used to compare two groups. Data are expressed as means ±SEM. n=5-6. \*\*\*, *P*＜0.001.