**Supplementary table 1**: Genes which were upregulated more than 2-fold in tumors of Control-AAV infected mice were selected. Real-time RT-PCR analysis revealed that Spink1 is significantly induced in the tumors and the respective p-value for this difference (p = 0.01289) was chosen as cut off value. None of the genes differed in the normal liver tissues (NT) of Control-AAV and chemerin-156-AAV (Ch-156) (n = 5 mice) infected animals. Gm25482 (predicted gene, 25482) was reduced in tumor tissues (TT) of mice overexpressing chemerin-156 and is highlighted in red. Well established tumor markers (alpha fetoprotein, Afp; glypican 3, Gpc3) and genes analyzed by real-time RT-PCR or immunoblot analysis are highlighted in grey color. Fold changes (FC) and p-values for the comparison of TT and NT of Control-AAV and of chemerin-156-AAV injected mice, respectively, are given in the columns 1 to 4. Fold changes (FC) and p-values for comparison of NT or TT of both groups are listed in columns 5 to 8.

| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | |
|---|---|---|---|---|---|---|---|---|
| FC TT/NT Control-AAV | p-value TT/NT Control-AAV | FC TT/NT Ch-156 AAV | p-value TT/NT Ch-156 AAV | FC NT Ch-156 /NT Control-AAV | p-value NT Ch-156 AAV /NT Control-AAV | FC TT Ch-156 AAV /TT Control-AAV | p-value TT Chemerin-156-AAV /TT Control-AAV | Gene Symbol |
| 25.44 | 0.00399 | 21.04 | 0.00319 | 1.39 | 0.49125 | 1.15 | 0.82745 | Akr1c18 |
| 17.28 | 0.00546 | 21.41 | 0.03110 | -1.16 | 0.40119 | 1.07 | 0.95005 | Gpc3 |
| 12.63 | 0.00362 | 8.56 | 0.03087 | 1.25 | 0.55302 | -1.18 | 0.82850 | Tspan8 |
| 11.38 | 0.00159 | 12.32 | 0.00743 | 1.05 | 0.84113 | 1.14 | 0.79193 | Afp |
| 9.48 | 0.00826 | 12.51 | 0.00684 | -1.54 | 0.28641 | -1.17 | 0.82601 | Kif5c |
| 9.33 | 0.00087 | 11.98 | 0.00032 | -1.15 | 0.74079 | 1.11 | 0.81961 | Mir675 |
| 8.14 | 0.00266 | 8.29 | 0.00283 | -1.17 | 0.46269 | -1.15 | 0.71303 | Nrg1 |
| 7.87 | 0.00959 | 12.06 | 0.00818 | -1.19 | 0.60191 | 1.29 | 0.69246 | Slpi |
| 7.28 | 0.00327 | 9.87 | 0.00807 | -1.26 | 0.28350 | 1.07 | 0.91391 | 5330417C22Rik |
| 7.09 | 0.00628 | 9.33 | 0.00080 | 1.10 | 0.79407 | 1.45 | 0.22688 | --- |
| 6.62 | 0.00786 | 7.70 | 0.00072 | 1.14 | 0.71667 | 1.33 | 0.34079 | Scd2 |
| 6.42 | 0.01111 | 17.26 | 0.00076 | -1.29 | 0.41866 | 2.09 | 0.06010 | Alox5 |
| 6.30 | 0.00404 | 4.72 | 0.02786 | 1.45 | 0.22628 | 1.09 | 0.89850 | Bex1 |
| 5.66 | 0.00880 | 7.77 | 0.00003 | -1.06 | 0.75199 | 1.30 | 0.49502 | Cidea |
| 5.65 | 0.00536 | 8.16 | 0.00683 | -2.24 | 0.06389 | -1.55 | 0.38009 | Igfbp1 |
| 5.61 | 0.00386 | 4.73 | 0.00045 | 1.24 | 0.30465 | 1.04 | 0.86127 | Sytl5 |
| 5.58 | 0.00240 | 5.98 | 0.00299 | 1.05 | 0.84861 | 1.13 | 0.78640 | Sprr1a |
| 5.57 | 0.00818 | 5.82 | 0.00063 | -1.04 | 0.91561 | 1.01 | 0.96441 | Ifi27l2b |
| 5.53 | 0.01033 | 3.78 | 0.02286 | -1.11 | 0.45506 | -1.62 | 0.38111 | Adamts14 |
| 5.37 | 0.00526 | 5.42 | 0.00321 | -1.03 | 0.87135 | -1.02 | 0.95340 | Golm1 |
| 5.32 | 0.00369 | 7.05 | 0.00356 | -1.17 | 0.57468 | 1.13 | 0.67683 | Igdcc4 |
| 5.27 | 0.00220 | 7.24 | 0.00054 | -1.36 | 0.17591 | 1.01 | 0.96070 | Gria3 |
| 5.26 | 0.01289 | 10.48 | 0.01151 | 1.25 | 0.26944 | 2.49 | 0.15826 | Spink1 |
| 5.24 | 0.00792 | 6.88 | 0.00497 | 1.02 | 0.94798 | 1.34 | 0.43597 | Wfdc15b |
| 5.22 | 0.01070 | 4.14 | 0.03108 | 1.03 | 0.82303 | -1.23 | 0.71565 | Krt20 |
| 5.11 | 0.00663 | 6.34 | 0.00206 | -1.27 | 0.40083 | -1.03 | 0.93732 | LOC105245453 |
| 5.04 | 0.00569 | 7.19 | 0.00568 | -1.08 | 0.77180 | 1.33 | 0.44206 | Tlr1 |
| 4.97 | 0.00510 | 6.40 | 0.00217 | -1.30 | 0.33974 | -1.01 | 0.98432 | Nid1 |
| 4.95 | 0.00332 | 5.34 | 0.00475 | -1.33 | 0.13618 | -1.23 | 0.62174 | Krt23 |
| 4.88 | 0.00972 | 5.14 | 0.00205 | -1.46 | 0.36554 | -1.38 | 0.45471 | Dhrs9 |
| 4.76 | 0.00039 | 6.10 | 0.00053 | -1.39 | 0.14856 | -1.08 | 0.62679 | Cd63 |
| 4.74 | 0.00442 | 8.56 | 0.00007 | -2.56 | 0.02399 | -1.42 | 0.11209 | Egr1 |
| 4.68 | 0.00146 | 4.75 | 0.01263 | -1.12 | 0.65685 | -1.11 | 0.78745 | Il1rn |
| 4.56 | 0.01266 | 7.20 | 0.00164 | -1.47 | 0.05801 | 1.07 | 0.87031 | Casc4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4.44 | 0.00730 | 5.59 | 0.00028 | 1.33 | 0.18687 | 1.68 | 0.15365 | Pnpla3 |
| 4.44 | 0.00850 | 7.08 | 0.00031 | -1.61 | 0.23391 | -1.01 | 0.93984 | Abcd2 |
| 4.39 | 0.00864 | 7.33 | 0.00017 | -1.13 | 0.62900 | 1.47 | 0.07528 | Pls1 |
| 4.24 | 0.00097 | 5.15 | 0.00030 | -1.02 | 0.91702 | 1.20 | 0.27900 | Ccnd1 |
| 4.10 | 0.00228 | 4.41 | 0.00052 | 1.11 | 0.69344 | 1.19 | 0.29249 | Sqle |
| 4.07 | 0.00843 | 4.29 | 0.00627 | -1.39 | 0.21434 | -1.33 | 0.34413 | Dusp5 |
| 4.07 | 0.00679 | 5.49 | 0.00099 | -1.24 | 0.48834 | 1.09 | 0.61943 | Cdh1 |
| 4.03 | 0.00671 | 4.15 | 0.00599 | 1.02 | 0.96009 | 1.05 | 0.82464 | Tubb2a |
| 4.02 | 0.00177 | 4.10 | 0.01557 | -1.08 | 0.70905 | -1.06 | 0.83003 | 1810010H24Rik |
| 3.85 | 0.00565 | 3.19 | 0.00688 | 1.59 | 0.25245 | 1.32 | 0.44637 | Cyp2b13 |
| 3.84 | 0.00501 | 4.45 | 0.00460 | -1.06 | 0.83090 | 1.09 | 0.70213 | Cyp2b9 |
| 3.84 | 0.00206 | 5.18 | 0.00189 | -1.80 | 0.04981 | -1.34 | 0.06578 | Esm1 |
| 3.81 | 0.00420 | 5.10 | 0.00078 | -1.78 | 0.06109 | -1.33 | 0.31321 | Btg2 |
| 3.75 | 0.00159 | 4.75 | 0.00045 | 1.02 | 0.94697 | 1.29 | 0.44092 | Tmc5 |
| 3.75 | 0.01052 | 5.01 | 0.00181 | 1.08 | 0.80314 | 1.45 | 0.05259 | Klk1b4 |
| 3.71 | 0.00673 | 5.26 | 0.00042 | -1.34 | 0.17652 | 1.06 | 0.81381 | Mtmr11 |
| 3.71 | 0.00960 | 5.99 | 0.00098 | -1.41 | 0.37341 | 1.14 | 0.35507 | Prom2 |
| 3.68 | 0.00521 | 3.69 | 0.00118 | -1.22 | 0.26598 | -1.21 | 0.43165 | Tmem71 |
| 3.67 | 0.01071 | 5.06 | 0.00554 | 1.07 | 0.66908 | 1.48 | 0.38331 | Gprc5b |
| 3.67 | 0.00495 | 3.75 | 0.00406 | 1.05 | 0.76441 | 1.07 | 0.85197 | Aebp1 |
| 3.66 | 0.00526 | 2.65 | 0.11473 | 1.14 | 0.48548 | -1.22 | 0.72843 | Cxcl17 |
| 3.62 | 0.00380 | 4.16 | 0.01076 | -1.12 | 0.57166 | 1.02 | 0.95249 | Pde6c |
| 3.58 | 0.00490 | 2.96 | 0.00114 | 1.34 | 0.26339 | 1.11 | 0.58150 | Nsdhl |
| 3.58 | 0.00054 | 5.02 | 0.00103 | -1.21 | 0.25198 | 1.16 | 0.33649 | Plxnb1 |
| 3.55 | 0.00168 | 3.78 | 0.01758 | 1.33 | 0.10386 | 1.42 | 0.36604 | Prc1 |
| 3.52 | 0.00339 | 4.91 | 0.00002 | -1.28 | 0.30713 | 1.09 | 0.32058 | Pygb |
| 3.50 | 0.01266 | 3.53 | 0.01236 | 1.01 | 0.96093 | 1.01 | 0.96718 | Tmem45b |
| 3.50 | 0.00633 | 4.33 | 0.00049 | -1.27 | 0.34637 | -1.03 | 0.82130 | Gm10680 |
| 3.48 | 0.00791 | 3.74 | 0.00063 | -1.14 | 0.48715 | -1.07 | 0.64560 | Slc9a7 |
| 3.47 | 0.00817 | 3.15 | 0.00023 | 1.05 | 0.85822 | -1.05 | 0.82508 | Hmgcs1 |
| 3.42 | 0.00426 | 5.20 | 0.00005 | -1.56 | 0.06825 | -1.03 | 0.91355 | Nipal1 |
| 3.38 | 0.01121 | 5.26 | 0.00046 | -1.28 | 0.38932 | 1.21 | 0.09952 | BC089597 |
| 3.36 | 0.00713 | 3.40 | 0.00067 | 1.25 | 0.29582 | 1.27 | 0.29278 | Lss |
| 3.35 | 0.01012 | 4.64 | 0.00033 | -1.21 | 0.44326 | 1.15 | 0.50467 | --- |
| 3.35 | 0.00619 | 3.68 | 0.00797 | -1.06 | 0.67225 | 1.03 | 0.92376 | Osbpl10 |
| 3.30 | 0.01214 | 4.05 | 0.00661 | -1.24 | 0.26237 | -1.01 | 0.97231 | Tnfrsf10b |
| 3.29 | 0.00651 | 2.57 | 0.00803 | -1.08 | 0.73928 | -1.39 | 0.13068 | Ccdc120 |
| 3.29 | 0.00384 | 4.65 | 0.00120 | -1.03 | 0.90831 | 1.38 | 0.20225 | Cyp2a4 |
| 3.24 | 0.01249 | 5.50 | 0.00094 | -1.19 | 0.40401 | 1.43 | 0.26011 | Mki67 |
| 3.16 | 0.00077 | 2.82 | 0.00265 | -1.22 | 0.39334 | -1.37 | 0.14250 | Cd1d2 |
| 3.14 | 0.00352 | 5.10 | 0.00008 | -1.64 | 0.06161 | -1.01 | 0.92824 | Shc2 |
| 3.14 | 0.00518 | 3.54 | 0.00159 | -1.22 | 0.31485 | -1.09 | 0.66926 | --- |
| 3.13 | 0.00524 | 4.38 | 0.00132 | -1.10 | 0.49283 | 1.27 | 0.21961 | Tstd1 |
| 3.13 | 0.00535 | 2.83 | 0.00111 | 1.21 | 0.42354 | 1.10 | 0.55189 | Dhcr7 |
| 3.12 | 0.00101 | 3.09 | 0.06495 | -1.68 | 0.33159 | -1.70 | 0.32646 | Cyp17a1 |
| 3.10 | 0.00581 | 2.04 | 0.05196 | 1.12 | 0.50266 | -1.36 | 0.38330 | A730090H04Rik |
| 3.08 | 0.00249 | 3.18 | 0.00341 | 1.16 | 0.22373 | 1.19 | 0.59604 | Ect2 |
| 3.07 | 0.00226 | 3.23 | 0.00113 | -1.11 | 0.64397 | -1.05 | 0.67991 | Syne1 |
| 3.07 | 0.00595 | 3.40 | 0.00186 | -1.30 | 0.27521 | -1.17 | 0.43306 | Dab1 |
| 3.05 | 0.00247 | 2.49 | 0.00311 | -1.12 | 0.60201 | -1.37 | 0.12904 | Grhl1 |
| 3.04 | 0.00192 | 2.97 | 0.00063 | -1.01 | 0.94785 | -1.04 | 0.82917 | Tnfsfm13 |
| 3.02 | 0.00371 | 3.30 | 0.00365 | -1.23 | 0.14928 | -1.12 | 0.60117 | Bco1 |
| 2.98 | 0.01281 | 2.93 | 0.00228 | -1.18 | 0.12996 | -1.20 | 0.51767 | Nlrp12 |
| 2.98 | 0.00453 | 3.42 | 0.00370 | -1.05 | 0.71403 | 1.09 | 0.62929 | Ces2e |
| 2.95 | 0.00643 | 3.16 | 0.00736 | -1.27 | 0.38125 | -1.18 | 0.65539 | Cntnap1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2.93 | 0.00289 | 3.36 | 0.00335 | 1.23 | 0.27331 | 1.41 | 0.19861 | Lrrc24 |
| 2.93 | 0.00700 | 3.68 | 0.00731 | -1.06 | 0.72925 | 1.19 | 0.65042 | Col6a6 |
| 2.90 | 0.00007 | 2.74 | 0.00087 | 1.04 | 0.81094 | -1.02 | 0.86869 | Syne1 |
| 2.90 | 0.00014 | 3.32 | 0.00511 | -1.04 | 0.81259 | 1.11 | 0.62314 | Plek2 |
| 2.90 | 0.00887 | 1.62 | 0.05397 | 1.09 | 0.71533 | -1.63 | 0.16079 | Gm25923 |
| 2.89 | 0.00415 | 3.24 | 0.00229 | -1.03 | 0.88920 | 1.09 | 0.66784 | Fkbp11 |
| 2.86 | 0.00408 | 3.05 | 0.00106 | -1.01 | 0.95816 | 1.05 | 0.59039 | Syne1 |
| 2.86 | 0.00457 | 3.09 | 0.00118 | -1.02 | 0.89925 | 1.05 | 0.76861 | Fndc3b |
| 2.86 | 0.00020 | 3.07 | 0.00004 | -1.08 | 0.55760 | -1.00 | 0.97680 | Syne1 |
| 2.85 | 0.00435 | 3.99 | 0.00001 | -1.18 | 0.38432 | 1.18 | 0.06465 | Rbp1 |
| 2.85 | 0.00590 | 3.67 | 0.00040 | -1.21 | 0.32915 | 1.06 | 0.56309 | Sectm1a |
| 2.85 | 0.00714 | 3.71 | 0.00086 | -1.07 | 0.53135 | 1.22 | 0.49360 | Ttc39aos1 |
| 2.85 | 0.00852 | 3.06 | 0.00168 | -1.03 | 0.88882 | 1.05 | 0.83110 | Tgfbr2 |
| 2.85 | 0.00442 | 2.57 | 0.01265 | -1.23 | 0.05575 | -1.37 | 0.29487 | Tc2n |
| 2.84 | 0.00381 | 2.46 | 0.07184 | 1.12 | 0.83050 | -1.03 | 0.96090 | Lcn2 |
| 2.84 | 0.00065 | 2.28 | 0.00037 | 1.18 | 0.25392 | -1.06 | 0.62650 | Syne1 |
| 2.83 | 0.00667 | 3.49 | 0.00889 | -1.14 | 0.38092 | 1.08 | 0.81571 | Sparc |
| 2.83 | 0.00762 | 2.73 | 0.00032 | -1.10 | 0.62061 | -1.13 | 0.47771 | Abi2 |
| 2.82 | 0.00362 | 3.97 | 0.00020 | -1.29 | 0.16073 | 1.09 | 0.59223 | P2rx7 |
| 2.81 | 0.01167 | 3.53 | 0.00187 | 1.29 | 0.23676 | 1.62 | 0.06668 | Hao2 |
| 2.79 | 0.01244 | 2.58 | 0.00844 | -1.09 | 0.63877 | -1.18 | 0.51874 | Pck2 |
| 2.79 | 0.00521 | 2.99 | 0.00025 | 1.24 | 0.14252 | 1.33 | 0.23298 | Hmgcr |
| 2.79 | 0.00837 | 2.65 | 0.00229 | 1.19 | 0.43544 | 1.13 | 0.57971 | 1810055G02Rik |
| 2.78 | 0.00500 | 3.72 | 0.00729 | -1.05 | 0.85811 | 1.27 | 0.35776 | Chrm3 |
| 2.75 | 0.00427 | 3.31 | 0.00297 | 1.04 | 0.72907 | 1.25 | 0.30953 | Drc1 |
| 2.74 | 0.00130 | 3.28 | 0.00116 | -1.14 | 0.56910 | 1.05 | 0.82648 | Cyp51 |
| 2.73 | 0.00461 | 1.80 | 0.32787 | 1.60 | 0.02687 | 1.06 | 0.92260 | Cxcl13 |
| 2.72 | 0.00110 | 2.97 | 0.01092 | -1.12 | 0.35119 | -1.02 | 0.91463 | Uggt2 |
| 2.71 | 0.00681 | 4.14 | 0.00251 | 1.11 | 0.47649 | 1.69 | 0.18556 | Prom1 |
| 2.71 | 0.01108 | 2.38 | 0.04939 | 1.15 | 0.29762 | 1.00 | 0.98894 | Ptpre |
| 2.70 | 0.00236 | 3.80 | 0.00239 | -1.39 | 0.01711 | 1.01 | 0.96689 | Gm19510 |
| 2.70 | 0.00009 | 2.70 | 0.00023 | -1.09 | 0.49703 | -1.09 | 0.29103 | Syne1 |
| 2.70 | 0.00215 | 3.14 | 0.00018 | -1.23 | 0.18138 | -1.05 | 0.56573 | Syne1 |
| 2.69 | 0.00429 | 2.62 | 0.00501 | -1.14 | 0.54415 | -1.17 | 0.61698 | Fgl2 |
| 2.69 | 0.00138 | 3.07 | 0.00090 | -1.06 | 0.68778 | 1.08 | 0.60295 | Syne1 |
| 2.67 | 0.00404 | 3.91 | 0.00713 | -1.29 | 0.43775 | 1.13 | 0.25464 | Serpina12 |
| 2.64 | 0.01201 | 2.56 | 0.04052 | 1.00 | 0.99949 | -1.03 | 0.90248 | Cd276 |
| 2.64 | 0.00030 | 3.52 | 0.00008 | -1.25 | 0.18572 | 1.07 | 0.46505 | Syne1 |
| 2.63 | 0.00065 | 3.28 | 0.00030 | -1.23 | 0.21051 | 1.01 | 0.83077 | Syne1 |
| 2.61 | 0.01184 | 7.38 | 0.00318 | 1.29 | 0.19409 | 3.65 | 0.01343 | Pnpla5 |
| 2.60 | 0.00166 | 3.18 | 0.00011 | -1.21 | 0.30283 | 1.01 | 0.84652 | Syne1 |
| 2.60 | 0.00203 | 2.48 | 0.00463 | 1.33 | 0.27973 | 1.27 | 0.26945 | Fdps |
| 2.58 | 0.01075 | 3.02 | 0.00078 | -1.12 | 0.49795 | 1.04 | 0.83180 | Scn1b |
| 2.58 | 0.00021 | 2.32 | 0.05149 | -1.08 | 0.64020 | -1.20 | 0.62962 | Bcl2 |
| 2.56 | 0.00450 | 2.11 | 0.02740 | 1.03 | 0.82462 | -1.18 | 0.54777 | Panx1 |
| 2.56 | 0.00057 | 2.20 | 0.00071 | 1.13 | 0.25715 | -1.03 | 0.87465 | D1Ertd622e |
| 2.56 | 0.00110 | 2.37 | 0.00046 | 1.05 | 0.81045 | -1.02 | 0.91541 | Idi1 |
| 2.55 | 0.00426 | 2.65 | 0.00012 | 1.18 | 0.44654 | 1.22 | 0.35340 | Rdh11 |
| 2.55 | 0.01002 | 2.53 | 0.00855 | -1.07 | 0.78971 | -1.08 | 0.79481 | Ifi44 |
| 2.54 | 0.00364 | 5.26 | 0.00012 | -1.36 | 0.12519 | 1.52 | 0.03004 | Col4a3 |
| 2.53 | 0.00542 | 2.37 | 0.02291 | 1.54 | 0.18685 | 1.45 | 0.14580 | Fasn |
| 2.53 | 0.00088 | 3.23 | 0.00123 | -1.32 | 0.45630 | -1.03 | 0.94376 | Cxcl14 |
| 2.53 | 0.00598 | 2.76 | 0.01375 | -1.26 | 0.15677 | -1.15 | 0.51086 | Id1 |
| 2.53 | 0.00129 | 3.22 | 0.00635 | -1.12 | 0.31415 | 1.14 | 0.67060 | Ckap2 |
| 2.52 | 0.00143 | 2.37 | 0.00343 | 1.09 | 0.78019 | 1.02 | 0.92576 | Mpeg1 |
| 2.49 | 0.01225 | 3.53 | 0.00472 | -1.08 | 0.42244 | 1.31 | 0.49198 | Psat1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2.49 | 0.00015 | 2.41 | 0.00279 | -1.01 | 0.95625 | -1.04 | 0.77526 | Syne1 |
| 2.48 | 0.01030 | 4.14 | 0.00073 | -1.45 | 0.23410 | 1.15 | 0.25587 | Tff3 |
| 2.48 | 0.00527 | 2.61 | 0.00740 | 1.16 | 0.31821 | 1.22 | 0.39705 | Kif20a |
| 2.47 | 0.00039 | 2.30 | 0.00458 | -1.08 | 0.54886 | -1.16 | 0.28214 | Syne1 |
| 2.46 | 0.00301 | 2.57 | 0.00163 | -1.00 | 0.97237 | 1.04 | 0.83044 | Ttc39a |
| 2.46 | 0.00404 | 2.72 | 0.00014 | -1.29 | 0.08464 | -1.17 | 0.17927 | Sstr2 |
| 2.44 | 0.00239 | 2.22 | 0.00267 | -1.04 | 0.81464 | -1.14 | 0.46629 | Gm13657 |
| 2.44 | 0.00375 | 2.43 | 0.00342 | 1.02 | 0.86775 | 1.02 | 0.92979 | Syne1 |
| 2.43 | 0.00898 | 2.22 | 0.02513 | -1.00 | 0.95846 | -1.10 | 0.71078 | C330027C09Rik |
| 2.39 | 0.01170 | 2.08 | 0.00791 | 1.03 | 0.84252 | -1.12 | 0.59136 | Dusp6 |
| 2.37 | 0.00856 | 2.85 | 0.00090 | -1.04 | 0.60250 | 1.16 | 0.44616 | Rims2 |
| 2.35 | 0.00418 | 1.92 | 0.02767 | 1.03 | 0.93612 | -1.19 | 0.44025 | Angptl8 |
| 2.34 | 0.00544 | 2.41 | 0.01138 | -1.02 | 0.89537 | 1.01 | 0.96252 | Pygo1 |
| 2.34 | 0.00618 | 3.34 | 0.00000 | -1.53 | 0.12336 | -1.07 | 0.63860 | Lpl |
| 2.34 | 0.00002 | 2.73 | 0.00386 | -1.04 | 0.78448 | 1.12 | 0.53171 | Acsl4 |
| 2.33 | 0.01221 | 2.59 | 0.00116 | -1.04 | 0.81512 | 1.07 | 0.71937 | Myadm |
| 2.33 | 0.00663 | 2.30 | 0.01347 | 1.52 | 0.09353 | 1.50 | 0.10185 | Slc51b |
| 2.32 | 0.00238 | 2.51 | 0.00241 | -1.19 | 0.32425 | -1.10 | 0.24304 | Syne1 |
| 2.32 | 0.00788 | 2.21 | 0.00507 | -1.25 | 0.12526 | -1.31 | 0.08438 | Col4a5 |
| 2.32 | 0.00531 | 2.48 | 0.00113 | -1.05 | 0.84889 | 1.02 | 0.81782 | Syne1 |
| 2.32 | 0.00412 | 2.42 | 0.01381 | -1.00 | 0.97852 | 1.04 | 0.88531 | Msantd3 |
| 2.31 | 0.00010 | 2.56 | 0.00046 | 1.16 | 0.27000 | 1.28 | 0.05813 | Syne1 |
| 2.31 | 0.00140 | 3.32 | 0.00127 | -1.33 | 0.04927 | 1.09 | 0.63340 | D17H6S56E-5 |
| 2.29 | 0.00224 | 2.46 | 0.01173 | -1.05 | 0.78510 | 1.03 | 0.85029 | Syne1 |
| 2.29 | 0.00792 | 2.13 | 0.00242 | 1.26 | 0.25706 | 1.17 | 0.61025 | Glipr1 |
| 2.29 | 0.00247 | 2.24 | 0.00074 | 1.05 | 0.64400 | 1.03 | 0.77947 | Syne1 |
| 2.28 | 0.00106 | 2.41 | 0.00215 | 1.04 | 0.74080 | 1.10 | 0.40822 | Syne1 |
| 2.28 | 0.00001 | 2.56 | 0.00030 | -1.10 | 0.43671 | 1.02 | 0.91231 | 4930527F14Rik |
| 2.26 | 0.00030 | 2.82 | 0.00032 | -1.26 | 0.07586 | -1.01 | 0.85464 | Syne1 |
| 2.26 | 0.00434 | 2.67 | 0.00172 | 1.08 | 0.58211 | 1.27 | 0.27932 | D430020J02Rik |
| 2.25 | 0.00217 | 1.74 | 0.03381 | 1.24 | 0.44307 | -1.05 | 0.89971 | BC023105 |
| 2.25 | 0.00443 | 2.36 | 0.00051 | -1.06 | 0.67377 | -1.01 | 0.90667 | Syne1 |
| 2.25 | 0.00041 | 1.98 | 0.03087 | 1.28 | 0.23161 | 1.13 | 0.65862 | Abcb1a |
| 2.25 | 0.00007 | 3.22 | 0.00007 | -1.31 | 0.03526 | 1.10 | 0.17600 | Syne1 |
| 2.24 | 0.00809 | 2.74 | 0.00300 | -1.59 | 0.13744 | -1.30 | 0.17454 | Fabp4 |
| 2.22 | 0.00513 | 2.15 | 0.00223 | -1.00 | 0.98436 | -1.04 | 0.83297 | Cers6 |
| 2.21 | 0.00308 | 2.23 | 0.00315 | -1.13 | 0.23301 | -1.12 | 0.46074 | App |
| 2.20 | 0.01060 | 2.22 | 0.00519 | -1.40 | 0.04710 | -1.39 | 0.12260 | Cldnd2 |
| 2.19 | 0.01230 | 3.32 | 0.00096 | -1.39 | 0.07034 | 1.08 | 0.77314 | Gm11963 |
| 2.19 | 0.00173 | 2.46 | 0.00138 | -1.01 | 0.91821 | 1.11 | 0.21879 | Acsl5 |
| 2.17 | 0.00496 | 2.88 | 0.00094 | -1.32 | 0.13027 | 1.00 | 0.98771 | Syne1 |
| 2.17 | 0.00073 | 2.65 | 0.01392 | -1.05 | 0.76818 | 1.16 | 0.64459 | Cd40 |
| 2.17 | 0.00221 | 2.79 | 0.00188 | -1.10 | 0.50262 | 1.17 | 0.21904 | Syne1 |
| 2.17 | 0.00172 | 1.93 | 0.00055 | 1.21 | 0.39073 | 1.08 | 0.68241 | Msmo1 |
| 2.17 | 0.00242 | 2.53 | 0.00424 | -1.19 | 0.35549 | -1.02 | 0.87703 | Syne1 |
| 2.16 | 0.00726 | 2.41 | 0.00045 | -1.02 | 0.83487 | 1.09 | 0.28546 | Syne1 |
| 2.15 | 0.00252 | 1.98 | 0.00281 | 1.13 | 0.21319 | 1.03 | 0.79711 | Acaca |
| 2.15 | 0.00000 | 1.88 | 0.00563 | -1.02 | 0.91873 | -1.16 | 0.45165 | Bmp8b |
| 2.14 | 0.00945 | 2.05 | 0.03070 | 1.14 | 0.45758 | 1.10 | 0.76471 | Arhgef2 |
| 2.13 | 0.00226 | 2.01 | 0.01952 | -1.03 | 0.78419 | -1.09 | 0.64392 | Jazf1 |
| 2.12 | 0.00631 | 1.71 | 0.00675 | -1.09 | 0.56914 | -1.35 | 0.19266 | Morc4 |
| 2.12 | 0.00330 | 2.17 | 0.00109 | -1.03 | 0.81599 | -1.01 | 0.95537 | Plscr1 |
| 2.11 | 0.01042 | 1.66 | 0.01701 | 1.34 | 0.10152 | 1.05 | 0.73185 | Mvk |
| 2.11 | 0.00122 | 2.70 | 0.00138 | 1.08 | 0.40893 | 1.39 | 0.03611 | Ccne1 |
| 2.10 | 0.00280 | 1.76 | 0.02750 | -1.03 | 0.85626 | -1.22 | 0.16046 | Trim68 |
| 2.09 | 0.00229 | 2.29 | 0.00069 | -1.11 | 0.45093 | -1.01 | 0.91955 | Ccdc125 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2.09 | 0.00708 | 2.04 | 0.00333 | 1.01 | 0.96393 | -1.02 | 0.91074 | Pgm3 |
| 2.09 | 0.00182 | 2.61 | 0.00001 | -1.18 | 0.24614 | 1.06 | 0.57253 | Syne1 |
| 2.07 | 0.00212 | 2.71 | 0.00029 | -1.04 | 0.84489 | 1.26 | 0.33705 | Sel1l3 |
| 2.06 | 0.00498 | 1.86 | 0.00171 | -1.04 | 0.86365 | -1.15 | 0.17842 | Nab2 |
| 2.06 | 0.00915 | -1.04 | 0.86786 | -1.17 | 0.46355 | -2.51 | 0.00883 | Gm25482 |
| 2.06 | 0.00153 | 2.68 | 0.00782 | -1.33 | 0.28086 | -1.02 | 0.88233 | Osbpl3 |
| 2.06 | 0.01138 | 2.10 | 0.08383 | 1.13 | 0.10269 | 1.16 | 0.72219 | --- |
| 2.06 | 0.01138 | 2.10 | 0.08383 | 1.13 | 0.10269 | 1.16 | 0.72219 | --- |
| 2.06 | 0.00045 | 2.16 | 0.01125 | -1.14 | 0.23379 | -1.09 | 0.55350 | Syne1 |
| 2.05 | 0.00027 | 2.77 | 0.00079 | -1.31 | 0.07519 | 1.03 | 0.78764 | Adrbk2 |
| 2.05 | 0.00076 | 2.39 | 0.00192 | -1.10 | 0.49969 | 1.06 | 0.54019 | Syne1 |
| 2.04 | 0.00706 | 2.58 | 0.00226 | -1.05 | 0.67034 | 1.20 | 0.52570 | Unc5b |
| 2.03 | 0.00170 | 2.12 | 0.00209 | -1.32 | 0.03744 | -1.26 | 0.10143 | Fam3c |
| 2.03 | 0.00869 | 2.29 | 0.01651 | -1.19 | 0.07912 | -1.05 | 0.83391 | Kif20b |
| 2.03 | 0.00844 | 2.47 | 0.00573 | -1.23 | 0.43715 | -1.01 | 0.97156 | Fam198a |
| 2.03 | 0.00744 | 2.50 | 0.01109 | -1.15 | 0.14610 | 1.08 | 0.78860 | Rhbdf1 |
| 2.03 | 0.01069 | 2.06 | 0.00372 | 1.06 | 0.66981 | 1.07 | 0.62570 | Satb2 |
| 2.02 | 0.00038 | 2.33 | 0.00085 | -1.15 | 0.20475 | 1.00 | 0.96714 | Syne1 |
| 2.01 | 0.00707 | 2.13 | 0.00143 | -1.04 | 0.75232 | 1.02 | 0.90702 | Ctps2 |
| 2.01 | 0.00804 | 2.66 | 0.00014 | 1.05 | 0.79932 | 1.39 | 0.07259 | Prss8 |
| 2.01 | 0.00576 | 1.94 | 0.01857 | 1.12 | 0.22800 | 1.08 | 0.75265 | Cenpf |
| 2.01 | 0.00380 | 2.04 | 0.00964 | -1.23 | 0.21305 | -1.21 | 0.19699 | Sorbs2 |

**Supplementary table 2**: Genes which were downregulated more than 2-fold in tumors of Control-AAV infected mice were selected. Real-time RT-PCR analysis revealed that Spink1 is significantly induced in the tumors and the respective p-value for this difference (p = 0.01289) was chosen as cut off value. Three genes (dedicator of cytokinesis 8, Dock8; phospholysine phosphohistidine inorganic pyrophosphate phosphatase, Lhpp and cytochrome P450, family 1, subfamily a, polypeptide 2, Cyp1a2) were higher in the normal liver tissues (NT) of Chemerin-156-AAV infected and are highlighted in red color. None of the genes differed in the tumor tissues (TT) of Control-AAV and chemerin-156-AAV (Ch-156) infected animals. Fold changes (FC) and p-values for the comparison of TT and NT of Control-AAV and of chemerin-156-AAV injected mice are given in the columns 1 to 4. Fold changes (FC) and p-values for comparison of NT or TT of both groups are listed in columns 5 to 8.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|---|---|---|---|---|---|---|---|---|
| FC TT/NT Control-AAV | p-value TT/NT Control-AAV | FC TT/NT Ch-156 AAV | p-value TT/NT Ch-156 AAV | FC NT Ch-156 /NT Control-AAV | p-value NT Ch-156 AAV /NT Control-AAV | FC TT Ch-156 AAV /TT Control-AAV | p-value TT Chemerin-156-AAV /TT Control-AAV | Gene Symbol |
| -2.01 | 0.01095 | -2.55 | 0.00205 | 1.00 | 0.97522 | -1.27 | 0.24709 | Sugct |
| -2.01 | 0.01287 | -2.21 | 0.00424 | 1.03 | 0.89327 | -1.07 | 0.73382 | Dkk4 |
| -2.02 | 0.00125 | -2.21 | 0.00721 | 1.02 | 0.84789 | -1.07 | 0.68931 | Notum |
| -2.02 | 0.01117 | -2.61 | 0.04197 | 1.23 | 0.61767 | -1.05 | 0.81972 | Rnase2a |
| -2.02 | 0.00362 | -2.06 | 0.03248 | -1.89 | 0.13729 | -1.93 | 0.10902 | Gadd45g |
| -2.02 | 0.01081 | -1.94 | 0.00998 | -1.11 | 0.52547 | -1.07 | 0.78060 | Gpcpd1 |
| -2.03 | 0.01281 | -2.55 | 0.00090 | 1.15 | 0.41108 | -1.10 | 0.43528 | Lgr5 |
| -2.03 | 0.01242 | -2.32 | 0.00365 | 1.21 | 0.12257 | 1.06 | 0.78629 | Rgn |
| -2.03 | 0.00691 | -2.37 | 0.00191 | 1.30 | 0.08740 | 1.12 | 0.56421 | Alas2 |
| -2.05 | 0.00518 | -2.68 | 0.00435 | 1.19 | 0.05141 | -1.10 | 0.71693 | Slco2b1 |
| -2.05 | 0.00088 | -1.31 | 0.06263 | -1.37 | 0.04289 | 1.14 | 0.45160 | Gm25149 |
| -2.05 | 0.00248 | -3.94 | 0.00112 | 1.14 | 0.48967 | -1.69 | 0.02487 | Acss3 |
| -2.06 | 0.01014 | -1.63 | 0.06444 | -1.30 | 0.10434 | -1.03 | 0.90283 | Hnf1aos1 |
| -2.06 | 0.00242 | -2.44 | 0.00165 | 1.09 | 0.42356 | -1.08 | 0.62431 | Aox1 |
| -2.07 | 0.01134 | -2.21 | 0.00316 | 1.00 | 0.98236 | -1.07 | 0.73721 | Slco1b2 |
| -2.09 | 0.00331 | -2.13 | 0.00141 | 1.07 | 0.67014 | 1.05 | 0.80423 | Lama3 |
| -2.09 | 0.00011 | -2.11 | 0.00093 | 1.01 | 0.87101 | 1.01 | 0.97277 | Ptk2b |
| -2.12 | 0.00086 | -2.26 | 0.01434 | 1.04 | 0.73763 | -1.03 | 0.91672 | Keg1 |
| -2.12 | 0.00060 | -2.52 | 0.00260 | 1.17 | 0.23074 | -1.01 | 0.94405 | Cyp2d9 |
| -2.14 | 0.00050 | -2.15 | 0.03795 | 1.18 | 0.41306 | 1.17 | 0.39369 | Gabrb3 |
| -2.14 | 0.00041 | -2.62 | 0.00625 | 1.25 | 0.09869 | 1.02 | 0.87878 | Hhip |
| -2.14 | 0.01006 | -2.74 | 0.00304 | 1.17 | 0.09143 | -1.09 | 0.71640 | Slc25a21 |
| -2.15 | 0.01104 | -2.02 | 0.00638 | -1.29 | 0.31908 | -1.21 | 0.42128 | Chrna2 |
| -2.18 | 0.00509 | -2.25 | 0.00126 | 1.19 | 0.00808 | 1.15 | 0.46488 | Dock8 |
| -2.24 | 0.00541 | -2.63 | 0.00709 | -1.13 | 0.62739 | -1.32 | 0.34429 | Ddc |
| -2.24 | 0.00100 | -4.09 | 0.00006 | 1.63 | 0.01158 | -1.12 | 0.28445 | Lhpp |
| -2.24 | 0.00218 | -2.78 | 0.00037 | -1.01 | 0.91561 | -1.25 | 0.30910 | Avpr1a |
| -2.25 | 0.00998 | -2.73 | 0.00427 | -1.19 | 0.27430 | -1.45 | 0.30897 | Cyp8b1 |
| -2.26 | 0.00499 | -1.96 | 0.00286 | -1.09 | 0.66019 | 1.05 | 0.84248 | Ankrd55 |
| -2.28 | 0.00140 | -2.71 | 0.00112 | 1.02 | 0.90990 | -1.17 | 0.52278 | Colec10 |
| -2.28 | 0.00473 | -2.87 | 0.00189 | -1.09 | 0.74200 | -1.38 | 0.31936 | Cyp7a1 |
| -2.28 | 0.00431 | -2.72 | 0.00034 | 1.10 | 0.10281 | -1.09 | 0.60957 | Cyp27a1 |
| -2.29 | 0.00035 | -2.39 | 0.01951 | 1.11 | 0.50774 | 1.06 | 0.63917 | Cd163 |
| -2.29 | 0.00036 | -2.42 | 0.00311 | 1.02 | 0.94644 | -1.04 | 0.84494 | Mustn1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| -2.29 | 0.00204 | -2.57 | 0.01544 | 1.29 | 0.04135 | 1.15 | 0.54297 | D630033O11Rik |
| -2.30 | 0.00255 | -2.91 | 0.02471 | -1.01 | 0.95593 | -1.28 | 0.58444 | Ces1e |
| -2.30 | 0.00949 | -2.48 | 0.00613 | 1.13 | 0.03096 | 1.04 | 0.86282 | Ces1b |
| -2.31 | 0.00249 | -1.82 | 0.06268 | -1.15 | 0.43040 | 1.11 | 0.69743 | Serpinb1a |
| -2.32 | 0.00613 | -3.54 | 0.00002 | 1.34 | 0.04654 | -1.14 | 0.59290 | Ildr2 |
| -2.32 | 0.00402 | -2.53 | 0.00467 | 1.09 | 0.34148 | 1.00 | 0.99961 | Sulf2 |
| -2.32 | 0.00061 | -2.50 | 0.00768 | 1.09 | 0.65673 | 1.01 | 0.90227 | Pcp4l1 |
| -2.35 | 0.00158 | -3.12 | 0.00011 | 1.24 | 0.14233 | -1.08 | 0.57940 | Tbx3 |
| -2.35 | 0.01164 | -1.63 | 0.01264 | -1.02 | 0.93374 | 1.41 | 0.22715 | Gm17077 |
| -2.36 | 0.00915 | -2.31 | 0.04516 | 1.06 | 0.88480 | 1.08 | 0.50280 | E030018B13Rik |
| -2.38 | 0.00503 | -2.56 | 0.00698 | 1.10 | 0.55709 | 1.02 | 0.92935 | Sult5a1 |
| -2.42 | 0.00815 | -2.40 | 0.00931 | -1.12 | 0.40467 | -1.11 | 0.64168 | Asic5 |
| -2.42 | 0.00808 | -1.94 | 0.17190 | -1.48 | 0.39195 | -1.18 | 0.55211 | 5730420D15Rik |
| -2.42 | 0.00042 | -3.45 | 0.00014 | 1.11 | 0.53315 | -1.28 | 0.07720 | Plekhb1 |
| -2.43 | 0.00364 | -2.64 | 0.00207 | 1.09 | 0.74253 | 1.00 | 0.99492 | Nr1i3 |
| -2.44 | 0.00924 | -2.78 | 0.00316 | 1.44 | 0.15128 | 1.26 | 0.23538 | Fam25c |
| -2.44 | 0.00063 | -2.79 | 0.00073 | 1.11 | 0.36924 | -1.03 | 0.83652 | Npr2 |
| -2.45 | 0.00433 | -3.28 | 0.00076 | -1.13 | 0.63468 | -1.51 | 0.08022 | Csad |
| -2.47 | 0.00026 | -2.72 | 0.00047 | -1.09 | 0.63207 | -1.20 | 0.26495 | Serpine2 |
| -2.48 | 0.00210 | -2.80 | 0.01016 | 1.13 | 0.45854 | -1.00 | 0.99757 | Onecut2 |
| -2.48 | 0.00164 | -2.88 | 0.01958 | -1.06 | 0.61989 | -1.23 | 0.58014 | Slco1a1 |
| -2.48 | 0.00032 | -2.98 | 0.00007 | 1.16 | 0.47161 | -1.04 | 0.84429 | Car1 |
| -2.49 | 0.00726 | -2.76 | 0.00250 | 1.05 | 0.80933 | -1.06 | 0.86591 | Cyp46a1 |
| -2.54 | 0.00856 | -2.49 | 0.00748 | 1.13 | 0.25422 | 1.15 | 0.67317 | Cyp2c29 |
| -2.56 | 0.00258 | -2.96 | 0.00128 | 1.19 | 0.00965 | 1.03 | 0.89223 | Cyp1a2 |
| -2.57 | 0.00015 | -2.94 | 0.00021 | 1.40 | 0.17143 | 1.22 | 0.48628 | Hsd3b4 |
| -2.57 | 0.00015 | -2.94 | 0.00021 | 1.40 | 0.17143 | 1.22 | 0.48628 | Hsd3b4 |
| -2.58 | 0.00024 | -2.06 | 0.00387 | 1.02 | 0.86681 | 1.27 | 0.20390 | Lrit2 |
| -2.60 | 0.00167 | -2.55 | 0.00257 | 1.20 | 0.37070 | 1.22 | 0.26159 | Rmdn2 |
| -2.64 | 0.00566 | -2.71 | 0.00119 | 1.00 | 0.99139 | -1.02 | 0.91760 | Kcnk1 |
| -2.66 | 0.00130 | -3.23 | 0.00095 | 1.08 | 0.68100 | -1.13 | 0.56258 | Ablim3 |
| -2.69 | 0.00229 | -3.42 | 0.00150 | 1.22 | 0.08659 | -1.04 | 0.80923 | Gas1 |
| -2.73 | 0.00237 | -1.79 | 0.00039 | -2.31 | 0.04210 | -1.52 | 0.14024 | Hspa1b |
| -2.74 | 0.00220 | -3.20 | 0.00018 | 1.40 | 0.01848 | 1.20 | 0.09203 | Arhgef37 |
| -2.75 | 0.00155 | -3.12 | 0.00083 | 1.06 | 0.73550 | -1.07 | 0.79962 | 9130409I23Rik |
| -2.75 | 0.00315 | -3.82 | 0.00434 | 1.19 | 0.42574 | -1.17 | 0.37256 | Slc39a2 |
| -2.79 | 0.00002 | -3.33 | 0.00223 | 1.03 | 0.88895 | -1.16 | 0.51945 | Gna14 |
| -2.81 | 0.00806 | -2.60 | 0.00671 | -1.21 | 0.47802 | -1.12 | 0.59654 | Ranbp3l |
| -2.84 | 0.01026 | -2.98 | 0.01396 | 1.68 | 0.20203 | 1.60 | 0.21888 | Gm12718 |
| -2.87 | 0.00996 | -3.13 | 0.02178 | -1.09 | 0.81350 | -1.18 | 0.77600 | Gm13773 |
| -2.90 | 0.00334 | -3.49 | 0.01719 | 1.18 | 0.33884 | -1.02 | 0.95759 | Cyp2c50 |
| -2.90 | 0.00509 | -2.99 | 0.00814 | 1.02 | 0.87581 | -1.01 | 0.97636 | Scnn1a |
| -2.94 | 0.00036 | -3.65 | 0.00731 | -1.63 | 0.35716 | -2.03 | 0.09933 | Acot1 |
| -2.95 | 0.00003 | -3.21 | 0.00003 | 1.20 | 0.13923 | 1.11 | 0.34780 | Slc15a5 |
| -2.96 | 0.00102 | -2.99 | 0.00012 | -1.00 | 0.97287 | -1.02 | 0.92693 | Gm3776 |
| -2.96 | 0.00578 | -3.90 | 0.00265 | 1.18 | 0.28242 | -1.11 | 0.69288 | Pdilt |
| -2.99 | 0.00950 | -3.61 | 0.00744 | 1.29 | 0.74799 | 1.07 | 0.92471 | Saa2 |
| -3.01 | 0.00123 | -3.22 | 0.00017 | 1.19 | 0.03400 | 1.11 | 0.45670 | Prodh |
| -3.02 | 0.00716 | -2.28 | 0.03246 | -1.02 | 0.95404 | 1.29 | 0.25014 | Gm38455 |
| -3.05 | 0.00092 | -3.28 | 0.00023 | -1.07 | 0.72751 | -1.15 | 0.23400 | Sema3e |
| -3.11 | 0.00616 | -3.51 | 0.00440 | -1.02 | 0.85056 | -1.15 | 0.68598 | Cyp4a12a |
| -3.14 | 0.00114 | -3.51 | 0.00175 | 1.11 | 0.42949 | -1.00 | 0.97935 | Slc1a2 |
| -3.27 | 0.00669 | -4.11 | 0.00336 | 1.12 | 0.65787 | -1.12 | 0.33181 | Ctcflos |
| -3.28 | 0.00411 | -4.18 | 0.00724 | 1.33 | 0.04510 | 1.04 | 0.88422 | Oat |
| -3.34 | 0.00830 | -3.66 | 0.00394 | 1.09 | 0.57856 | -1.00 | 0.99101 | Cyp2c54 |
| -3.40 | 0.00102 | -3.86 | 0.00073 | 1.10 | 0.54094 | -1.03 | 0.92197 | Susd4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| -3.40 | 0.00034 | -3.04 | 0.00703 | -1.28 | 0.27476 | -1.15 | 0.55796 | Cyp4a12b |
| -3.43 | 0.00133 | -4.17 | 0.00443 | 1.01 | 0.97097 | -1.21 | 0.58428 | Cyp7b1 |
| -3.43 | 0.00285 | -3.81 | 0.02495 | -1.64 | 0.42339 | -1.82 | 0.33654 | Serpina4-ps1 |
| -3.45 | 0.00083 | -3.43 | 0.05993 | 1.33 | 0.33574 | 1.34 | 0.53315 | C4a |
| -3.57 | 0.00160 | -4.34 | 0.00048 | 1.13 | 0.55372 | -1.07 | 0.74539 | 1700080G11Rik |
| -3.69 | 0.00055 | -4.00 | 0.00005 | -1.03 | 0.74885 | -1.12 | 0.55980 | Tlr5 |
| -3.73 | 0.00222 | -2.11 | 0.02672 | 1.06 | 0.76289 | 1.88 | 0.07889 | Trhde |
| -3.78 | 0.00285 | -4.22 | 0.02452 | 1.81 | 0.04302 | 1.62 | 0.35234 | Lrtm1 |
| -3.79 | 0.00291 | -3.99 | 0.00265 | -1.06 | 0.64762 | -1.12 | 0.66960 | Cyp2c37 |
| -4.38 | 0.00331 | -5.30 | 0.00076 | 1.33 | 0.40945 | 1.10 | 0.82779 | Hsd3b5 |
| -4.76 | 0.00027 | -6.96 | 0.00502 | 1.29 | 0.64219 | -1.14 | 0.87341 | Elovl3 |
| -5.28 | 0.00627 | -5.82 | 0.00634 | 1.28 | 0.15152 | 1.16 | 0.76192 | Etnppl |
| -5.52 | 0.00024 | -5.99 | 0.00122 | 1.18 | 0.59656 | 1.08 | 0.71746 | Orm3 |
| -5.62 | 0.00273 | -5.58 | 0.00894 | 1.05 | 0.89929 | 1.06 | 0.89166 | Gm23340 |
| -6.99 | 0.00100 | -11.72 | 0.01137 | 1.08 | 0.90679 | -1.56 | 0.48703 | Obp2a |

**Supplementary Table 3**: Proteins with a role in lipid metabolism were analyzed by immunoblot in the normal tissues (NT) and the tumor tissues (TT) of Control-AAV and Chemerin-156-AAV infected mice. ApoA1 and Fabp5 were similarly changed in the tumors of both groups. ** $p < 0.01$, *** $p < 0.001$.

| Protein | Animal Group | Tissue | Animal number | Median and range | p-value |
|---|---|---|---|---|---|
| ApoA1 | Control-AAV | NT | 9 | 0.9 (0.0 - 1.4) | |
| | Control-AAV | TT | 9 | 0.1 (0.0 - 0.5) | ** |
| | Chemerin-156-AAV | NT | 12 | 0.9 (0.3 - 1.8) | |
| | Chemerin-156-AAV | TT | 12 | 0.0 (0.0 - 0.4) | *** |
| Fabp5 | Control-AAV | NT | 9 | 0.2 (0.0 - 0.6) | |
| | Control-AAV | TT | 9 | 0.4 (0.3 - 2.0) | |
| | Chemerin-156-AAV | NT | 12 | 0.2 (0.0 - 0.5) | |
| | Chemerin-156-AAV | TT | 12 | 0.9 (0.3 - 1.7) | *** |
| FAS | Control-AAV | NT | 9 | 0.3 (0.2 - 1.3) | |
| | Control-AAV | TT | 9 | 0.8 (0.4 - 1.3) | |
| | Chemerin-156-AAV | NT | 12 | 0.7 (0.2 - 2.5) | |
| | Chemerin-156-AAV | TT | 12 | 1.0 (0.3 - 2.4) | |
| SREBP2 Active | Control-AAV | NT | 9 | 0.8 (0.2 - 2.5) | |
| | Control-AAV | TT | 9 | 0.5 (0.2 - 1.0) | |
| | Chemerin-156-AAV | NT | 12 | 0.8 (0.3 - 1.8) | |
| | Chemerin-156-AAV | TT | 12 | 0.3 (0.0 - 1.7) | |
| SREBP2 Full-length | Control-AAV | NT | 9 | 0.4 (0.1 - 1.0) | |
| | Control-AAV | TT | 9 | 0.7 (0.2 - 1.2) | |
| | Chemerin-156-AAV | NT | 12 | 0.4 (0.1 - 1.4) | |
| | Chemerin-156-AAV | TT | 12 | 0.5 (0.0 - 1.5) | |
| SND1 | Control-AAV | NT | 9 | 0.9 (0.5 - 1.1) | |
| | Control-AAV | TT | 8 | 0.9 (0.6 - 1.7) | |
| | Chemerin-156-AAV | NT | 12 | 0.8 (0.5 - 1.4) | |
| | Chemerin-156-AAV | TT | 11 | 0.9 (0.6 - 2.4) | |
| SREBP1c Active | Control-AAV | NT | 9 | 0.4 (0.0 - 1.1) | |
| | Control-AAV | TT | 8 | 0.6 (0.1 -2.0) | |
| | Chemerin-156-AAV | NT | 12 | 0.3 (0.0 - 1.8) | |
| | Chemerin-156-AAV | TT | 12 | 0.4 (0.0 - 1.8) | |
| SREBP1c Full-length | Control-AAV | NT | 9 | 0.5 (0.1 - 1.2) | |
| | Control-AAV | TT | 9 | 0.7 (0.2 - 2.1) | |
| | Chemerin-156-AAV | NT | 12 | 0.7 (0.2 - 2.0) | |
| | Chemerin-156-AAV | TT | 12 | 0.9 (0.3 - 1.9) | |
| SCD1 | Control-AAV | NT | 9 | 0.8 (0.0 - 1.8) | |
| | Control-AAV | TT | 9 | 1.0 (0.0 -1.8) | |
| | Chemerin-156-AAV | NT | 12 | 0.6 (0.0 - 1.7) | |
| | Chemerin-156-AAV | TT | 12 | 0.6 (0.0 - 1.5) | |

**Supplementary Table 4**: Triglyceride (TG) species in normal tissue (NT) and tumor tissue (TT) of Control-AAV and Chemerin-156-AAV injected mice. Lipids are given in nmol/mg wet weight. Hepatic triglyceride species were increased in the tumors but did neither differ in NT nor TT of Control-AAV and Chemerin-156-AAV injected mice. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

| TG Species | Animal Group | Tissue | Median and range | p-value (relative to the respective NT) |
|---|---|---|---|---|
| 48:0 | Control-AAV | NT | 0.01 (0.01 - 0.02) | |
| | Control-AAV | TT | 0.04 (0.02 - 0.14) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.01 - 0.01) | |
| | Chemerin-156-AAV | TT | 0.06 (0.01 -0.18) | ** |
| 48:1 | Control-AAV | NT | 0.01 (0.01 - 0.03) | |
| | Control-AAV | TT | 0.15 (0.04 - 0.38) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.01 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.13 (0.02 - 0.41) | *** |
| 48:2 | Control-AAV | NT | 0.01 (0.00 - 0.04) | |
| | Control-AAV | TT | 0.13 (0.03 - 0.31) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.04) | |
| | Chemerin-156-AAV | TT | 0.1 (0.02 - 0.36) | *** |
| 48:3 | Control-AAV | NT | 0.01 (0.00 - 0.30) | |
| | Control-AAV | TT | 0.05 (0.02 - 0.18) | ** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.03) | |
| | Chemerin-156-AAV | TT | 0.05 (0.00 - 0.16) | ** |
| 49:1 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control AAV | TT | 0.02 (0.00 - 0.04) | ** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.01 (0.00 - 0.05) | *** |
| 49:2 | Control-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Control-AAV | TT | 0.00 (0.00 - 0.01) | *** |
| | Chemerin-156-AAV | NT | 0.02 (0.00 - 0.06) | |
| | Chemerin-156-AAV | TT | 0.02 (0.00 - 0.06) | *** |
| 50:1 | Control-AAV | NT | 0.08 (0.04 - 0.23) | |
| | Control-AAV | TT | 1.38 (0.39 - 4.09) | ** |
| | Chemerin-156-AAV | NT | 0.09 (0.06 - 0.17) | |
| | Chemerin-156-AAV | TT | 1.48 (0.19 - 3.61) | *** |
| 50:2 | Control-AAV | NT | 0.12 (0.05 - 0.41) | |
| | Control-AAV | TT | 2.29 (0.65 - 6.11) | *** |
| | Chemerin-156-AAV | NT | 0.14 (0.06 – 0.48) | |
| | Chemerin-156-AAV | TT | 1.95 (0.21 - 5.59) | *** |
| 50:3 | Control-AAV | NT | 0.08 (0.03 - 0.36) | |
| | Control-AAV | TT | 1.00 (0.30 - 2.87) | *** |
| | Chemerin-156-AAV | NT | 0.07 (0.03 – 0.45) | |
| | Chemerin-156-AAV | TT | 0.90 (0.08 - 2.90) | ** |
| 50:4 | Control-AAV | NT | 0.03 (0.01 - 0.15) | |
| | Control-AAV | TT | 0.22 (0.08 - 0.71) | ** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.19) | |
| | Chemerin-156-AAV | TT | 0.24 (0.02 - 0.72) | ** |
| 50:5 | Control-AAV | NT | 0.01 (0.00 – 0.04) | |
| | Control-AAV | TT | 0.05 (0.02 - 0.23) | ** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 -0.05) | |
| | Chemerin-156-AAV | TT | 0.05 (0.00 - 0.19) | * |
| 50:6 | Control-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Control-AAV | TT | 0.01 (0.00 - 0.07) | * |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.01) | |

| | | | | |
|---|---|---|---|---|
| | Chemerin-156-AAV | TT | 0.01 (0.00 - 0.06) | |
| 51:1 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control-AAV | TT | 0.02 (0.01 - 0.05) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.02 (0.00 - 0.05) | *** |
| 51:2 | Control-AAV | NT | 0.01 (0.00 - 0.02) | |
| | Control-AAV | TT | 0.11 (0.03 - 0.28) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.10 (0.01 - 0.25) | *** |
| 51:3 | Control-AAV | NT | 0.01 (0.00 -0.04) | |
| | Control-AAV | TT | 0.09 (0.03 - 0.25) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.05) | |
| | Chemerin-156-AAV | TT | 0.09 (0.01 - 0.23) | *** |
| 51:4 | Control-AAV | NT | 0.01 (0.00 – 0.03) | |
| | Control-AAV | TT | 0.03 (0.01 - 0.09) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 -0.04) | |
| | Chemerin-156-AAV | TT | 0.04 (0.00 - 0.10) | * |
| 52:2 | Control-AAV | NT | 0.35 (0.18 - 1.17) | |
| | Control-AAV | TT | 7.44 (1.98 - 22.39) | *** |
| | Chemerin-156-AAV | NT | 0.45 (0.19 - 1.19) | |
| | Chemerin-156-AAV | TT | 6.67 (0.70 - 15.78) | *** |
| 52:3 | Control-AAV | NT | 0.78 (0.34 - 3.30) | |
| | Control-AAV | TT | 9.02 (3.64 - 28.14) | *** |
| | Chemerin-156-AAV | NT | 0.87 (0.36 - 4.15) | |
| | Chemerin-156-AAV | TT | 9.50 (0.90 - 21.60) | *** |
| 52:4 | Control-AAV | NT | 0.69 (0.29 - 3.12) | |
| | Control-AAV | TT | 3.70 (1.65 - 11.95) | ** |
| | Chemerin-156-AAV | NT | 0.65 (0.26 - 4.21) | |
| | Chemerin-156-AAV | TT | 4.36 (0.46 - 10.98) | ** |
| 52:5 | Control-AAV | NT | 0.14 (0.04 - 0.70) | |
| | Control-AAV | TT | 0.78 (0.33 - 2.36) | ** |
| | Chemerin-156-AAV | NT | 0.11 (0.04 -0.91) | |
| | Chemerin-156-AAV | TT | 0.86 (0.08 - 2.46) | ** |
| 52:6 | Control-AAV | NT | 0.02 (0.01 - 0.13) | |
| | Control-AAV | TT | 0.15 (0.06 - 0.55) | ** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.17) | |
| | Chemerin-156-AAV | TT | 0.14 (0.02 - 0.51) | * |
| 52:7 | Control-AAV | NT | 0.00 (0.00 - 0.03) | |
| | Control-AAV | TT | 0.03 (0.01 - 0.14) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 -0.03) | |
| | Chemerin-156-AAV | TT | 0.03 (0.00 - 0.12) | * |
| 53:2 | Control-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Control-AAV | TT | 0.08 (0.03 - 0.24) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Chemerin-156-AAV | TT | 0.08 (0.01 - 0.17) | *** |
| 53:3 | Control-AAV | NT | 0.01 (0.01 - 0.04) | |
| | Control-AAV | TT | 0.15 (0.05 - 0.42) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.01 - 0.05) | |
| | Chemerin-156-AAV | TT | 0.14 (0.01 - 0.32) | *** |
| 53:4 | Control-AAV | NT | 0.01 (0.00 - 0.05) | |
| | Control-AAV | TT | 0.10 (0.04 - 0.29) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 -0.07) | |
| | Chemerin-156-AAV | TT | 0.12 (0.01 - 0.26) | *** |
| 53:5 | Control-AAV | NT | 0.01 (0.00 - 0.03) | |
| | Control-AAV | TT | 0.07 (0.03 - 0.15) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.05) | |
| | Chemerin-156-AAV | TT | 0.07 (0.01 - 0.16) | *** |

| | | | | |
|---|---|---|---|---|
| 54:3 | Control-AAV | NT | 0.25 (0.13 - 0.74) | |
| | Control-AAV | TT | 5.14 (1.38 - 18.52) | *** |
| | Chemerin-156-AAV | NT | 0.29 (0.14 - 0.75) | |
| | Chemerin-156-AAV | TT | 5.67 (0.53 - 10.50) | *** |
| 54:4 | Control-AAV | NT | 0.53 (0.28 - 1.78) | |
| | Control-AAV | TT | 6.78 (2.42 - 22.65) | *** |
| | Chemerin-156-AAV | NT | 0.56 (0.28 - 2.19) | |
| | Chemerin-156-AAV | TT | 7.48 (0.75 - 14.23) | *** |
| 54:5 | Control-AAV | NT | 0.62 (0.31 - 2.20) | |
| | Control-AAV | TT | 4.36 (2.35 - 12.76) | *** |
| | Chemerin-156-AAV | NT | 0.54 (0.27 - 2.93) | |
| | Chemerin-156-AAV | TT | 4.39 (0.63 - 10.26) | *** |
| 54:6 | Control-AAV | NT | 0.38 (0.16 - 1.42) | |
| | Control-AAV | TT | 2.04 (1.07 - 5.17) | *** |
| | Chemerin-156-AAV | NT | 0.32 (0.14 - 1.92) | |
| | Chemerin-156-AAV | TT | 1.85 (0.35 - 5.34) | ** |
| 54:7 | Control-AAV | NT | 0.07 (0.02 - 0.36) | |
| | Control-AAV | TT | 0.45 (0.22 - 1.20) | ** |
| | Chemerin-156-AAV | NT | 0.06 (0.02 - 0.50) | |
| | Chemerin-156-AAV | TT | 0.41 (0.06 - 1.39) | ** |
| 55:2 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control-AAV | TT | 0.01 (0.00 - 0.04) | ** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.01 (0.00 - 0.02) | ** |
| 55:3 | Control-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Control-AAV | TT | 0.06 (0.02 - 0.20) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.01) | |
| | Chemerin-156-AAV | TT | 0.06 (0.00 - 0.12) | *** |
| 55:4 | Control-AAV | NT | 0.00 (0.00 - 0.02) | |
| | Control-AAV | TT | 0.07 (0.02 - 0.20) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.07 (0.01 - 0.13) | *** |
| 55:5 | Control-AAV | NT | 0.00 (0.00 - 0.02) | |
| | Control-AAV | TT | 0.05 (0.02 - 0.15) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.05 (0.01 - 0.12) | *** |
| 56:3 | Control-AAV | NT | 0.02 (0.02 - 0.08) | |
| | Control-AAV | TT | 0.52 (0.13 - 2.43) | *** |
| | Chemerin-156-AAV | NT | 0.03 (0.01 - 0.06) | |
| | Chemerin-156-AAV | TT | 0.67 (0.06 - 0.95) | ** |
| 56:4 | Control-AAV | NT | 0.07 (0.05 - 0.16) | |
| | Control-AAV | TT | 0.98 (0.24 - 3.64) | *** |
| | Chemerin-156-AAV | NT | 0.08 (0.04 - 0.16) | |
| | Chemerin-156-AAV | TT | 0.97 (0.15 - 1.72) | *** |
| 56:5 | Control-AAV | NT | 0.15 (0.09 - 0.32) | |
| | Control-AAV | TT | 1.50 (0.47 - 4.80) | *** |
| | Chemerin-156-AAV | NT | 0.17 (0.09 - 0.40) | |
| | Chemerin-156-AAV | TT | 1.70 (0.40 - 3.22) | *** |
| 56:6 | Control-AAV | NT | 0.24 (0.12 - 0.61) | |
| | Control-AAV | TT | 2.20 (0.84 - 5.94) | *** |
| | Chemerin-156-AAV | NT | 0.22 (0.11 - 0.71) | |
| | Chemerin-156-AAV | TT | 2.18 (0.54 - 4.75) | *** |
| 56:7 | Control-AAV | NT | 0.33 (0.14 - 0.95) | |
| | Control-AAV | TT | 2.75 (1.20 - 6.82) | *** |
| | Chemerin-156-AAV | NT | 0.26 (0.13 - 1.12) | |
| | Chemerin-156-AAV | TT | 2.53 (0.56 - 6.07) | *** |
| 56:8 | Control-AAV | NT | 0.26 (0.11 - 0.85) | |

| | | | | |
|---|---|---|---|---|
| | Control-AAV | TT | 1.60 (0.86 - 3.52) | *** |
| | Chemerin-156-AAV | NT | 0.21 (0.10 - 1.11) | |
| | Chemerin-156-AAV | TT | 1.25 (0.26 - 3.29) | ** |
| 57:4 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control-AAV | TT | 0.01 (0.00 - 0.04) | ** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.01 (0.00 - 0.01) | * |
| 57:5 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control-AAV | TT | 0.02 (0.00 - 0.05) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.02 (0.00 - 0.03) | *** |
| 58:3 | Control-AAV | NT | 0.01 (0.01 - 0.01) | |
| | Control-AAV | TT | 0.05 (0.01 - 0.19) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.01) | |
| | Chemerin-156-AAV | TT | 0.05 (0.01 - 0.07) | ** |
| 58:5 | Control-AAV | NT | 0.02 (0.01 - 0.03) | |
| | Control-AAV | TT | 0.16 (0.03 - 0.64) | *** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.04) | |
| | Chemerin-156-AAV | TT | 0.16 (0.06 - 0.33) | ** |
| 58:6 | Control-AAV | NT | 0.05 (0.03 - 0.08) | |
| | Control-AAV | TT | 0.05 (0.13 - 1.79) | *** |
| | Chemerin-156-AAV | NT | 0.05 (0.03 - 0.10) | |
| | Chemerin-156-AAV | TT | 0.06 (0.17 - 1.11) | *** |
| 58:7 | Control-AAV | NT | 0.10 (0.05 - 0.20) | |
| | Control-AAV | TT | 1.01 (0.30 - 2.74) | *** |
| | Chemerin-156-AAV | NT | 0.08 (0.04 - 0.22) | |
| | Chemerin-156-AAV | TT | 0.90 (0.28 - 2.00) | *** |
| 58:8 | Control-AAV | NT | 0.16 (0.08 - 0.35) | |
| | Control-AAV | TT | 1.26 (0.45 - 3.36) | *** |
| | Chemerin-156-AAV | NT | 0.13 (0.07 - 0.42) | |
| | Chemerin-156-AAV | TT | 1.27 (0.34 - 2.61) | *** |
| 59:8 | Control-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Control-AAV | TT | 0.01 (0.00 - 0.03) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 - 0.00) | |
| | Chemerin-156-AAV | TT | 0.01 (0.00 - 0.02) | *** |
| 60:7 | Control-AAV | NT | 0.01 (0.01 - 0.02) | |
| | Control-AAV | TT | 0.17 (0.02 - 0.73) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.15 (0.04 - 0.47) | ** |
| 60:8 | Control-AAV | NT | 0.03 (0.02 - 0.04) | |
| | Control-AAV | TT | 0.31 (0.07 - 0.10) | *** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.07) | |
| | Chemerin-156-AAV | TT | 0.30 (0.10 - 0.78) | *** |
| 60:9 | Control-AAV | NT | 0.03 (0.02 – 0.05) | |
| | Control-AAV | TT | 0.32 (0.10 - 0.85) | *** |
| | Chemerin-156-AAV | NT | 0.03 (0.01 - 0.07) | |
| | Chemerin-156-AAV | TT | 0.25 (0.10 - 0.74) | *** |

**Supplementary Table 5**: Diacylglycerol (DG) species in the normal tissues (NT) and the tumor tissues (TT) of Control-AAV and Chemerin-156-AAV infected mice. Lipids are given in nmol/mg wet weight. Hepatic DG species mostly increased in the tumors. DG species were similarly concentrated in tumorous and non-tumorous tissues of Control-AAV and Chemerin-156-AAV injected mice. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

| DG Species | Animal Group | Tissue | Median and range | p-value (relative to the respective NT) |
|---|---|---|---|---|
| 32:0 | Control-AAV | NT | 0.02 (0.01 - 0.02) | |
| | Control-AAV | TT | 0.04 (0.01 - 0.07) | *** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.05 (0.02 -0.06) | *** |
| 32:1 | Control-AAV | NT | 0.01 (0.01 - 0.02) | |
| | Control-AAV | TT | 0.04 (0.01 - 0.07) | *** |
| | Chemerin-156-AAV | NT | 0.01 (0.01 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.05 (0.02 - 0.07) | *** |
| 34:1 | Control-AAV | NT | 0.11 (0.09 - 0.18) | |
| | Control-AAV | TT | 0.50 (0.16 - 1.07) | *** |
| | Chemerin-156-AAV | NT | 0.13 (0.10 - 0.19) | |
| | Chemerin-156-AAV | TT | 0.58 (0.20 - 0.75) | *** |
| 34:2 | Control-AAV | NT | 0.17 (0.11 - 0.41) | |
| | Control-AAV | TT | 0.61 (0.26 - 1.15) | *** |
| | Chemerin-156-AAV | NT | 0.22 (0.16 - 0.41) | |
| | Chemerin-156-AAV | TT | 0.68 (0.21 - 0.95) | *** |
| 34:3 | Control-AAV | NT | 0.03 (0.01 - 0.08) | |
| | Control-AAV | TT | 0.12 (0.04 - 0.25) | ** |
| | Chemerin-156-AAV | NT | 0.04 (0.03 - 0.09) | |
| | Chemerin-156-AAV | TT | 0.14 (0.03 - 0.24) | ** |
| 36:2 | Control-AAV | NT | 0.11 (0.08 - 0.23) | |
| | Control-AAV | TT | 0.50 (0.13 - 0.91) | *** |
| | Chemerin-156-AAV | NT | 0.16 (0.10 – 0.23) | |
| | Chemerin-156-AAV | TT | 0.51 (0.14 – 1.07) | *** |
| 36:3 | Control-AAV | NT | 0.28 (0.12 - 0.58) | |
| | Control-AAV | TT | 0.67 (0.23 - 1.11) | * |
| | Chemerin-156-AAV | NT | 0.31 (0.15 – 0.64) | |
| | Chemerin-156-AAV | TT | 0.80 (0.17 - 1.45) | * |
| 36:4 | Control-AAV | NT | 0.25 (0.12 - 0.64) | |
| | Control-AAV | TT | 0.43 (0.21 - 0.78) | |
| | Chemerin-156-AAV | NT | 0.31 (0.15 - 0.64) | |
| | Chemerin-156-AAV | TT | 0.45 (0.14 - 0.80) | |
| 36:5 | Control-AAV | NT | 0.02 (0.01 - 0.08) | |
| | Control-AAV | TT | 0.03 (0.01 - 0.12) | |
| | Chemerin-156-AAV | NT | 0.03 (0.02 - 0.08) | |
| | Chemerin-156-AAV | TT | 0.04 (0.01 - 0.14) | |
| 38:3 | Control-AAV | NT | 0.01 (0.00 - 0.03) | |
| | Control-AAV | TT | 0.04 (0.01 - 0.11) | *** |
| | Chemerin-156-AAV | NT | 0.02 (0.01 - 0.03) | |
| | Chemerin-156-AAV | TT | 0.05 (0.02 - 0.12) | *** |
| 38:4 | Control-AAV | NT | 0.16 (0.09 - 0.24) | |
| | Control-AAV | TT | 0.21 (0.10 - 0.39) | |
| | Chemerin-156-AAV | NT | 0.12 (0.07 - 0.17) | |
| | Chemerin-156-AAV | TT | 0.23 (0.20 - 0.42) | *** |
| 38:5 | Control-AAV | NT | 0.07 (0.04 - 0.14) | |
| | Control-AAV | TT | 0.54 (0.21 - 1.48) | *** |
| | Chemerin-156-AAV | NT | 0.08 (0.04 - 0.12) | |

| | | | | |
|---|---|---|---|---|
| | Chemerin-156-AAV | TT | 0.51 (0.15 - 0.98) | *** |
| 38:6 | Control-AAV | NT | 0.10 (0.06 - 0.17) | |
| | Control-AAV | TT | 0.54 (0.21 - 1.48) | *** |
| | Chemerin-156-AAV | NT | 0.11 (0.07 - 0.17) | |
| | Chemerin-156-AAV | TT | 0.51 (0.15 - 0.98) | *** |
| 38:7 | Control-AAV | NT | 0.00 (0.00 – 0.02) | |
| | Control-AAV | TT | 0.03 (0.01 - 0.06) | *** |
| | Chemerin-156-AAV | NT | 0.00 (0.00 -0.02) | |
| | Chemerin-156-AAV | TT | 0.03 (0.00 - 0.06) | *** |
| 40:5 | Control-AAV | NT | 0.00 (0.00 - 0.03) | |
| | Control-AAV | TT | 0.03 (0.00 - 0.09) | ** |
| | Chemerin-156-AAV | NT | 0.01 (0.00 - 0.02) | |
| | Chemerin-156-AAV | TT | 0.04 (0.01 - 0.11) | * |
| 40:6 | Control-AAV | NT | 0.03 (0.02 – 0.07) | |
| | Control-AAV | TT | 0.11 (0.03 - 0.23) | *** |
| | Chemerin-156-AAV | NT | 0.04 (0.02 - 0.05) | |
| | Chemerin-156-AAV | TT | 0.11 (0.04 - 0.29) | *** |
| 40:7 | Control-AAV | NT | 0.05 (0.03 - 0.12) | |
| | Control-AAV | TT | 0.18 (0.05 – 0.37) | ** |
| | Chemerin-156-AAV | NT | 0.08 (0.03 - 0.13) | |
| | Chemerin-156-AAV | TT | 0.20 (0.05 - 0.56) | ** |
| 40:8 | Control-AAV | NT | 0.07 (0.03 - 0.16) | |
| | Control-AAV | TT | 0.11 (0.04 - 0.24) | |
| | Chemerin-156-AAV | NT | 0.09 (0.02 - 0.20) | |
| | Chemerin-156-AAV | TT | 0.11 (0.02 - 0.34) | |

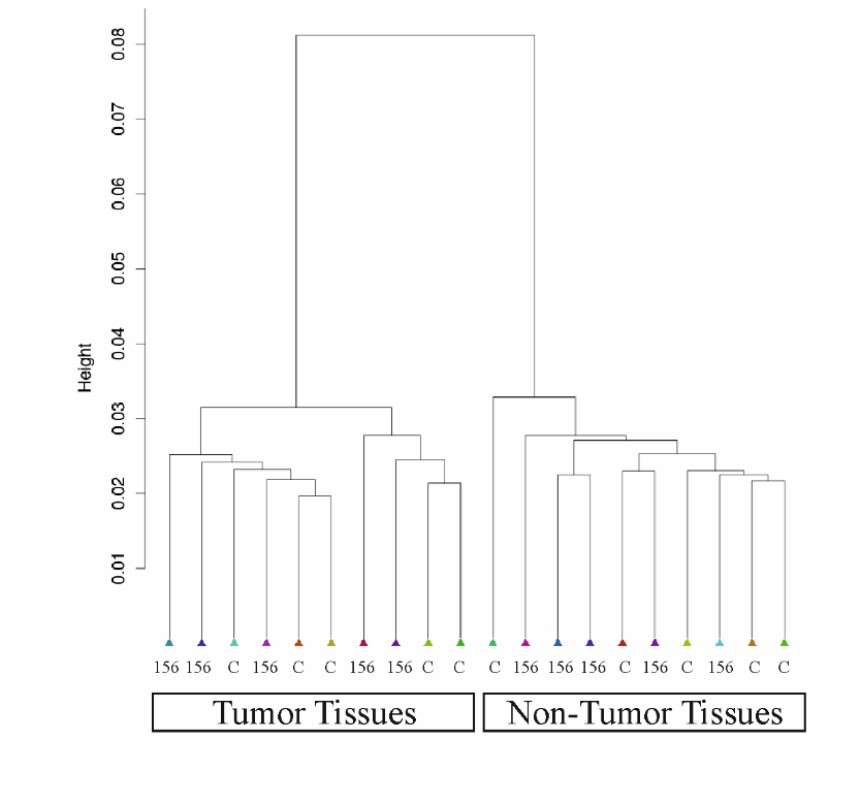
**Supplementary Table 6**: Antibodies used for immunblot experiments. The table provides information about the respective companies where the reagent were ordered, the order number and the dilution of the antibodies for immunoblot experiments.

| Antigen | Company | Order number | Dilution |
|---|---|---|---|
| ApoA1 | Biodesign | K45252G | 1 : 20.000 |
| β-catenin | Cell Signaling | 2698 | 1 : 1.000 |
| Chemerin | R&D Systems | AF2325 | 1 : 500 |
| CMKLR1 | Novus Biologicals | NBP2-13847 | 1 : 500 |
| Fabp5 | R&D Systems | AF1476 | 1 : 5.000 |
| FAS | Cell Signaling | 3180 | 1 : 1.000 |
| GAPDH | Cell Signaling | 2118 | 1 : 1.000 |
| MnSOD | Lab Frontier | LF-PA0021 | 1 : 2.000 |
| phospho-ß-Catenin (Ser33/37/Thr41) | Cell Signaling | 9561 | 1 : 1.000 |
| phospho-ß-Catenin (Ser552) | Cell Signaling | 9566 | 1 : 1.000 |
| SCD1 | Cell Signaling | 2794 | 1 : 1.000 |
| SND1 | Signalway Antibody | 38700 | 1 : 400 |
| SREBP1c | Thermo Scientific | MS-1207-P1 | 1 : 1.000 |
| SREBP2 | Cayman | 10007663 | 1 : 1.000 |

**Supplementary Table 7**: Primers used for real-time RT-PCR analysis. Cyclophilin A (Cyclo) was used for normalization.

| Gene | Sequence uni-Primer 5' → 3' | Sequence rev-Primer 5' → 3' |
|---|---|---|
| **Alox5** | GCATGCAGCTGTAAACTTCG | CCAGTGAAGGAAGCCATGAT |
| **CD38** | ACGCTGCCTCATCTACACTC | GGGGCGTAGTCTTCTCTTGT |
| **Chemerin** | AAACACCCACCTGTGCAGT | TTTTACCCTTGGGGTCCATT |
| **CMKLR1** | CTTCTCCCCTAATCCCCTCA | GGGGTGAGTGAGCCATTTT |
| **Col4a3** | ACGTGATGGAATTCCTGGTC | GTTCCAGGCTTGTCTGGC |
| **Egr1** | CCTATGAGCACCTGACCACA | GACCAATCCTCCGACCTCTT |
| **F4/80** | TGCTCTTCCTGATGGTGAGA | CCCCGTCTCTGTATTCAACC |
| **Fabp5** | ACGGCTTTGAGGAGTACATGA | GTCTGCACCTTCCAAGACG |
| **G6PC** | CCTGTGAGACCGGACCAG | TTGCTGTGGCTGAAACTTTCAG |
| **HMG-CoA-R** | TGTGCTTGGGGCTTCTGTA | CCACGTTCATGAGTTTCCATT |
| **IL-6** | CTCTGGGAAATCGTGGAAAT | CCAGTTTGGTAGCATCCATC |
| **Ly49C** | CCCTATTCCAGGGAGCTGT | TCTGTTTACCAGGAAGGAAGATG |
| **Ncr1** | TTGGCTCTTACAACGACTATGC | GTTGAAAGGTCAAACTCCCAAT |
| **Pnpla5** | ACCATTGCCGACAAGGTTAC | CACTGAGAAAGGCATGCAAG |
| **Slc12a1** | TATTTGCACAAACGGAGTGGTG | CTCAAGTCATTCTCCTGGTCATT |
| **Spink1** | CACCCAGATCTTCGACAATG | GTCCTCATTCGAAAAGGTGG |
| ***α*SMA** | CCAGCACCATGAAGATCAAG | CTTCGTCGTATTCCTGTTTGC |

**Supplementary figure 1**




Cluster dendrogram of the microarray data. Normal tissues are more similar to each other than they are to the tumor tissues. Tissues of Control-AAV (C) and Chemerin-156-AAV (156) infected mice are similar to each other.