Supplemental Table 1a

The 49 transcripts down-regulated less than one-tenth and showed significant differences (ANOVA p-value < 0.05) in the conjunctival epithelium of SJS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Fold Change  | ANOVA p-value  | Gene Accession | Gene Symbol | Gene Description |
| -86.97 | 0.005 | NM\_001145006  | MUC7  | mucin 7, secreted  |
| -67.01 | 0.019 | NM\_002644  | PIGR  | polymeric immunoglobulin receptor  |
| -59.17 | 0.021 | NM\_001039372  | HEPACAM2  | HEPACAM family member 2  |
| -53.46 | 0.019 | NM\_000669  | ADH1C  | alcohol dehydrogenase 1C (class I), gamma polypeptide  |
| -53.25 | 0.000 | NM\_012390  | SMR3A  | submaxillary gland androgen regulated protein 3A  |
| -45.90 | 0.015 | NM\_021572  | ENPP5  | ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative)  |
| -42.57 | 0.049 | NM\_000096  | CP  | ceruloplasmin (ferroxidase)  |
| -39.40 | 0.005 | NM\_000064  | C3  | complement component 3  |
| -36.64 | 0.002 | NM\_003225  | TFF1  | trefoil factor 1  |
| -35.67 | 0.049 | NM\_180991  | SLCO4C1  | solute carrier organic anion transporter family, member 4C1  |
| -28.51 | 0.003 | NM\_145740  | GSTA1  | glutathione S-transferase alpha 1  |
| -28.43 | 0.009 | NM\_001010893  | SLC10A5  | solute carrier family 10 (sodium/bile acid cotransporter family), member 5  |
| -27.68 | 0.042 | NM\_002354  | EPCAM  | epithelial cell adhesion molecule  |
| -26.96 | 0.020 | NM\_003154  | STATH  | statherin  |
| -25.07 | 0.015 | NM\_000300  | PLA2G2A  | phospholipase A2, group IIA (platelets, synovial fluid)  |
| -23.40 | 0.002 | NM\_003679  | KMO  | kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)  |
| -21.22 | 0.011 | NM\_001098484  | SLC4A4  | solute carrier family 4, sodium bicarbonate cotransporter, member 4  |
| -20.41 | 0.008 | NM\_012431  | SEMA3E  | sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E  |
| -18.73 | 0.040 | NM\_002354  | EPCAM  | epithelial cell adhesion molecule  |
| -18.46 | 0.033 | NM\_001201  | BMP3  | bone morphogenetic protein 3  |
| -17.53 | 0.021 | NM\_005845  | ABCC4  | ATP-binding cassette, sub-family C (CFTR/MRP), member 4  |
| -17.52 | 0.020 | NM\_004616  | TSPAN8  | tetraspanin 8  |
| -16.91 | 0.007 | NM\_004440  | EPHA7  | EPH receptor A7  |
| -16.69 | 0.043 | NM\_024626  | VTCN1  | V-set domain containing T cell activation inhibitor 1  |
| -16.03 | 0.009 | NM\_025208  | PDGFD  | platelet derived growth factor D  |
| -16.00 | 0.007 | NM\_006408  | AGR2  | anterior gradient homolog 2 (Xenopus laevis)  |
| -15.41 | 0.013 | NM\_002443  | MSMB  | microseminoprotein, beta-  |
| -14.97 | 0.019 | NM\_130808  | CPNE4  | copine IV  |
| -14.88 | 0.005 | NM\_005019  | PDE1A  | phosphodiesterase 1A, calmodulin-dependent  |
| -14.18 | 0.003 | NM\_004056  | CA8  | carbonic anhydrase VIII  |
| -14.08 | 0.012 | NM\_003944  | SELENBP1  | selenium binding protein 1  |
| -14.07 | 0.016 | NM\_172316  | MEIS2  | Meis homeobox 2  |
| -13.65 | 0.024 | NM\_004447  | EPS8  | epidermal growth factor receptor pathway substrate 8  |
| -12.66 | 0.006 | NM\_006685  | SMR3B  | submaxillary gland androgen regulated protein 3B  |
| -12.52 | 0.007 | NM\_006528  | TFPI2  | tissue factor pathway inhibitor 2  |
| -12.30 | 0.029 | NM\_033266  | ERN2  | endoplasmic reticulum to nucleus signaling 2  |
| -12.10 | 0.019 | NM\_001012993  | C9orf152  | chromosome 9 open reading frame 152  |
| -11.72 | 0.036 | NM\_017709  | FAM46C  | family with sequence similarity 46, member C  |
| -11.51 | 0.012 | NM\_005518  | HMGCS2  | 3-hydroxy-3-methylglutaryl-CoA synthase 2 (mitochondrial)  |
| -11.51 | 0.013 | NR\_026543  | C21orf88  | chromosome 21 open reading frame 88  |
| -11.32 | 0.017 | NM\_001128310  | SPARCL1  | SPARC-like 1 (hevin)  |
| -11.06 | 0.000 | NM\_012306  | FAIM2  | Fas apoptotic inhibitory molecule 2  |
| -10.69 | 0.045 | NM\_033495  | KLHL13  | kelch-like 13 (Drosophila)  |
| -10.45 | 0.036 | NM\_015678  | NBEA  | neurobeachin  |
| -10.43 | 0.032 | NM\_018728  | MYO5C  | myosin VC  |
| -10.34 | 0.049 | NM\_000187  | HGD  | homogentisate 1,2-dioxygenase  |
| -10.34 | 0.049 | NM\_000187  | HGD  | homogentisate 1,2-dioxygenase  |
| -10.21 | 0.006 | NM\_022569  | NDST4  | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 4  |
| -10.20 | 0.027 | NM\_007288  | MME  | membrane metallo-endopeptidase  |
| -10.17 | 0.007 | NR\_036521  | LOC100128252  | hypothetical LOC100128252  |

Supplemental Table 1b

The 62 transcripts up-regulated more than 10-fold and showed significant differences (ANOVA p-value < 0.05) in the conjunctival epithelium of SJS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Fold change  | ANOVA p-value | Gene Accession | Gene Symbol | Gene Description |
| 193.83 | 0.0023 | NM\_002974  | SERPINB4  | serpin peptidase inhibitor, clade B, member 4  |
| 173.26 | 0.0001 | NM\_006121  | KRT1  | keratin 1  |
| 150.7 | 0.0007 | NM\_207392  | KRTDAP  | keratinocyte differentiation-associated protein  |
| 123.93 | 0.0007 | NM\_002963  | S100A7  | S100 calcium binding protein A7  |
| 121.69 | 0.0019 | NM\_001166034  | SBSN  | suprabasin  |
| 96.09 | 0.0046 | NM\_002774  | KLK6  | kallikrein-related peptidase 6  |
| 91.02 | 0.0025 | NM\_080474  | SERPINB12  | serpin peptidase inhibitor, clade B, member 12  |
| 89.35 | 0.0009 | NM\_001011709  | PNLIPRP3  | pancreatic lipase-related protein 3  |
| 85.8 | 0.0008 | NM\_012114  | CASP14  | caspase 14, apoptosis-related cysteine peptidase  |
| 68.67 | 0.0077 | AK302302  | ODZ2  | odz, odd Oz/ten-m homolog 2  |
| 53.44 | 0.0146 | NM\_000067  | CA2  | carbonic anhydrase II  |
| 53.04 | 0.0188 | NM\_019060  | CRCT1  | cysteine-rich C-terminal 1  |
| 52.76 | 0.0004 | NM\_025087  | CWH43  | cell wall biogenesis 43 C-terminal homolog  |
| 51.27 | 0.0043 | NM\_002016  | FLG  | filaggrin  |
| 41.8 | 0.0010 | NM\_176823  | S100A7A  | S100 calcium binding protein A7A  |
| 41.7 | 0.0183 | NM\_032488  | CNFN  | cornifelin  |
| 38.26 | 0.0058 | NM\_018004  | TMEM45A  | transmembrane protein 45A  |
| 35.82 | 0.0058 | NM\_020299  | AKR1B10  | aldo-keto reductase family 1, member B10  |
| 32.67 | 0.0088 | NM\_001110219  | GJB6  | gap junction protein, beta 6, 30kDa  |
| 28.65 | 0.0299 | NM\_006919  | SERPINB3  | serpin peptidase inhibitor, clade B, member 3  |
| 28.21 | 0.0062 | NM\_001432  | EREG  | epiregulin  |
| 27.72 | 0.0143 | NM\_058173  | MUCL1  | mucin-like 1  |
| 26.13 | 0.0020 | NM\_152443  | RDH12  | retinol dehydrogenase 12  |
| 23.82 | 0.0026 | NM\_207407  | TMPRSS11F  | transmembrane protease, serine 11F  |
| 23.64 | 0.0105 | NM\_001870  | CPA3  | carboxypeptidase A3 (mast cell)  |
| 23.26 | 0.0075 | NM\_144505  | KLK8  | kallikrein-related peptidase 8  |
| 22.84 | 0.0167 | NM\_016321  | RHCG  | Rh family, C glycoprotein  |
| 22.35 | 0.0048 | NM\_173483  | CYP4F22  | cytochrome P450, family 4, subfamily F, polypeptide 22  |
| 22.09 | 0.0407 | NM\_207373  | C10orf99  | chromosome 10 open reading frame 99  |
| 22.02 | 0.0076 | NM\_001099287  | NIPAL4  | NIPA-like domain containing 4  |
| 21.18 | 0.0464 | NM\_133492  | ACER1  | alkaline ceramidase 1  |
| 20.17 | 0.0006 | NM\_001460  | FMO2  | flavin containing monooxygenase 2  |
| 19.65 | 0.0413 | NM\_014058  | TMPRSS11E  | transmembrane protease, serine 11E  |
| 19.5 | 0.0484 | NM\_000165  | GJA1  | gap junction protein, alpha 1, 43kDa  |
| 19.31 | 0.0028 | NM\_012427  | KLK5  | kallikrein-related peptidase 5  |
| 19.3 | 0.0397 | NM\_014058  | TMPRSS11E  | transmembrane protease, serine 11E  |
| 18.65 | 0.0398 | NM\_025261  | LY6G6C  | lymphocyte antigen 6 complex, locus G6C  |
| 18.62 | 0.0394 | NM\_025261  | LY6G6C  | lymphocyte antigen 6 complex, locus G6C  |
| 18.43 | 0.0265 | NM\_002426  | MMP12  | matrix metallopeptidase 12  |
| 18.4 | 0.0163 | NM\_004425  | ECM1  | extracellular matrix protein 1  |
| 17.67 | 0.0100 | NM\_002160  | TNC  | tenascin C  |
| 17.46 | 0.0024 | NM\_005073  | SLC15A1  | solute carrier family 15, member 1  |
| 16.66 | 0.0132 | NM\_001785  | CDA  | cytidine deaminase  |
| 16.61 | 0.0430 | NM\_025261  | LY6G6C  | lymphocyte antigen 6 complex, locus G6C  |
| 16.47 | 0.0213 | NM\_148897  | SDR9C7  | short chain dehydrogenase/reductase family 9C, member 7  |
| 16.39 | 0.0201 | NM\_198965  | PTHLH  | parathyroid hormone-like hormone  |
| 16.14 | 0.0236 | NM\_005398  | PPP1R3C  | protein phosphatase 1, regulatory subunit 3C  |
| 15.67 | 0.0064 | NM\_005557  | KRT16  | keratin 16  |
| 14.99 | 0.0060 | NM\_002421  | MMP1  | matrix metallopeptidase 1  |
| 13.95 | 0.0247 | NM\_015596  | KLK13  | kallikrein-related peptidase 13  |
| 13.89 | 0.0202 | NM\_001001548  | CD36  | CD36 molecule  |
| 13.67 | 0.0007 | NM\_197965  | SLC10A6  | solute carrier family 10, member 6  |
| 13.59 | 0.0025 | NM\_000962  | PTGS1  | prostaglandin-endoperoxide synthase 1  |
| 13.49 | 0.0090 | NM\_001085  | SERPINA3  | serpin peptidase inhibitor, clade A, member 3  |
| 13.43 | 0.0062 | NM\_003247  | THBS2  | thrombospondin 2  |
| 13.3 | 0.0023 | NM\_003914  | CCNA1  | cyclin A1  |
| 12.72 | 0.0160 | NM\_013230  | CD24  | CD24 molecule  |
| 12.13 | 0.0387 | NM\_000853  | GSTT1  | glutathione S-transferase theta 1  |
| 11.49 | 0.0022 | NM\_002307  | LGALS7  | lectin, galactoside-binding, soluble, 7  |
| 10.96 | 0.0024 | NM\_002307  | LGALS7  | lectin, galactoside-binding, soluble, 7  |
| 10.81 | 0.0089 | NM\_002192  | INHBA  | inhibin, beta A  |
| 10.68 | 0.0201 | NM\_001172439  | ENDOU  | endonuclease, polyU-specific  |
| 10.64 | 0.0374 | NM\_004744  | LRAT  | lecithin retinol acyltransferase  |
| 10.36 | 0.0491 | NM\_024421  | DSC1  | desmocollin 1  |
| 10.32 | 0.0196 | NM\_014375  | FETUB  | fetuin B  |
| 10.25 | 0.0014 | NM\_173505  | ANKRD29  | ankyrin repeat domain 29  |