

## **Supplementary material:**

### **Primary cilia control endothelial permeability by regulating expression and location of junction proteins**

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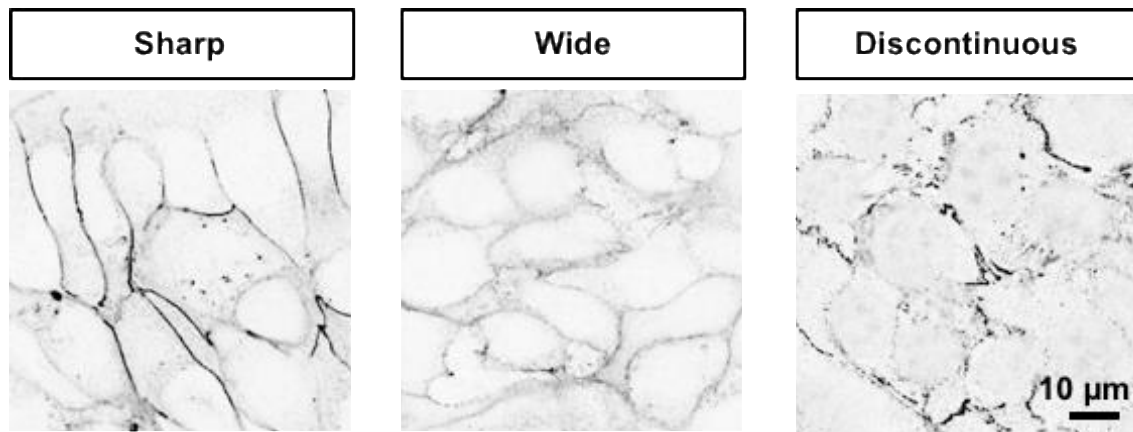
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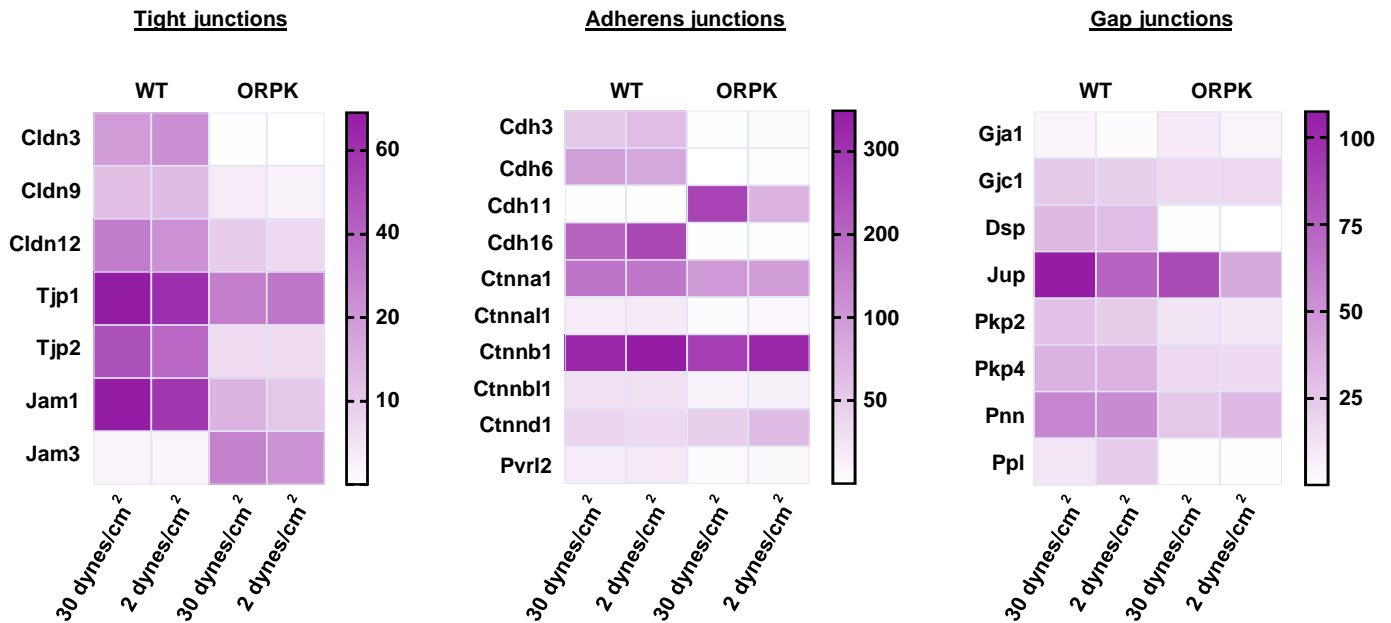
E-mail: [Brenda.KwakChanson@unige.ch](mailto:Brenda.KwakChanson@unige.ch)

## Supplemental figure 1



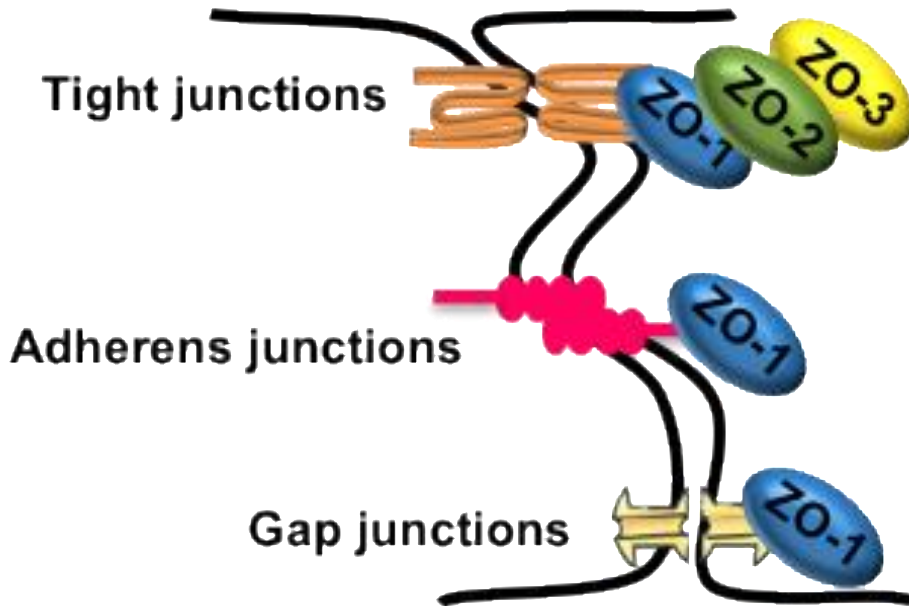
**Figure S1:** Representative images illustrating junctional organization categories.

## Supplemental figure 2



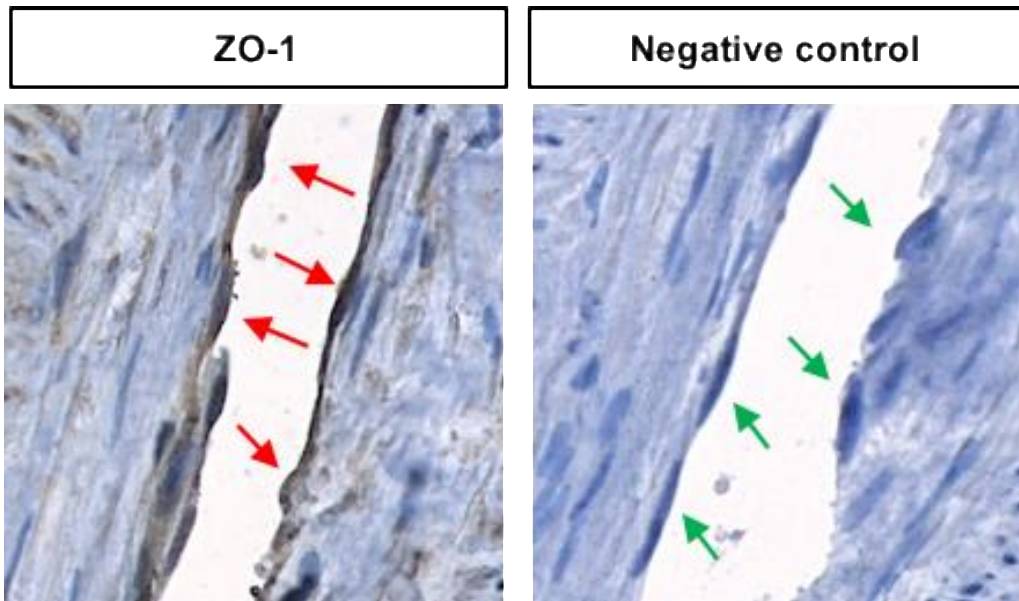
**Figure S2:** Heatmaps comparing expression levels of tight junctions, adherens junctions, gap junctions and associated desmosomal-family genes in wild-type (WT) and *Tg737<sup>orpk/orpk</sup>* (ORPK) ECs. Gene expression levels are represented in RPKM.

### Supplemental figure 3



**Figure S3:** Schematic representation of ZO-1 linking to tight junction, adherens junction and gap junction proteins.

## Supplemental figure 4



**Figure S4:** Representative examples of ZO-1 immunostaining (in brown; some positive ECs are indicated with red arrows) and its negative control (omission of first antibody; some not stained ECs are indicated with green arrows) performed on a human superficial temporal artery.

**Table S1: Differentially expressed genes in wild-type ECs: 2 vs. 30dynes/cm<sup>2</sup>**Genes in **bold** are cilia-independent regulated genes, also changed in Tg737<sup>orpk/orpk</sup> ECs

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
<b>ENSMUSG00000074896</b>	<b><i>Ifit3</i></b>	<b>3.64</b>	<b>9.437E-91</b>
ENSMUSG00000062488	<i>I830012O16Rik</i>	2.95	2.296E-27
ENSMUSG00000023122	<i>Sult1c2</i>	2.49	6.648E-68
ENSMUSG00000024621	<i>Csflr</i>	2.20	3.114E-155
ENSMUSG00000016942	<i>Tmprss6</i>	2.18	1.207E-47
<b>ENSMUSG00000022206</b>	<b><i>Npr3</i></b>	<b>2.03</b>	<b>1.268E-263</b>
ENSMUSG00000027831	<i>Veph1</i>	2.00	1.683E-35
ENSMUSG00000029372	<i>Ppbp</i>	1.99	1.066E-13
ENSMUSG00000047230	<i>Cldn2</i>	1.94	1.727E-101
ENSMUSG00000023914	<i>Mep1a</i>	1.91	2.243E-22
ENSMUSG00000035451	<i>Foxa1</i>	1.86	5.023E-45
ENSMUSG00000057265	<i>Ccdc176</i>	1.85	4.890E-29
ENSMUSG00000017002	<i>Slpi</i>	1.84	1.197E-18
ENSMUSG00000020990	<i>Cdkl1</i>	1.82	1.752E-39
ENSMUSG00000018126	<i>Baiap2l2</i>	1.81	7.513E-12
ENSMUSG00000023959	<i>Clic5</i>	1.77	1.385E-88
ENSMUSG00000017868	<i>Sgk2</i>	1.76	6.567E-25
<b>ENSMUSG00000031980</b>	<b><i>Agt</i></b>	<b>1.74</b>	<b>2.851E-40</b>
ENSMUSG00000079017	<i>Ifi27l2a</i>	1.72	1.955E-04
ENSMUSG00000049907	<i>Rasl11b</i>	1.70	8.453E-156
<b>ENSMUSG00000034459</b>	<b><i>Ifit1</i></b>	<b>1.70</b>	<b>5.828E-57</b>
<b>ENSMUSG00000037010</b>	<b><i>Apln</i></b>	<b>1.69</b>	<b>4.517E-156</b>
ENSMUSG00000020486	<i>Sept4</i>	1.68	4.606E-74
ENSMUSG00000021223	<i>Papln</i>	1.68	1.747E-66
ENSMUSG00000005232	<i>G6pc2</i>	1.67	1.532E-73
ENSMUSG00000071551	<i>Akr1c19</i>	1.64	2.008E-25
ENSMUSG00000028357	<i>Kif12</i>	1.61	1.148E-27
ENSMUSG00000074183	<i>Gsta1</i>	1.59	4.871E-04
<b>ENSMUSG00000024910</b>	<b><i>Ctsw</i></b>	<b>-4.34</b>	<b>1.499E-119</b>
ENSMUSG00000036381	<i>P2ry14</i>	-4.07	1.134E-74
<b>ENSMUSG00000046318</b>	<b><i>Ccbe1</i></b>	<b>-4.07</b>	<b>5.731E-25</b>
<b>ENSMUSG00000026414</b>	<b><i>Tnnt2</i></b>	<b>-3.07</b>	<b>1.175E-177</b>
ENSMUSG00000007888	<i>Crlfl</i>	-2.50	1.250E-249
<b>ENSMUSG00000031075</b>	<b><i>Ano1</i></b>	<b>-2.45</b>	<b>2.651E-177</b>
<b>ENSMUSG00000079465</b>	<b><i>Col4a3</i></b>	<b>-2.23</b>	<b>6.600E-52</b>
<b>ENSMUSG00000038400</b>	<b><i>Pmepa1</i></b>	<b>-2.23</b>	<b>0.000E+00</b>
<b>ENSMUSG00000027750</b>	<b><i>Postn</i></b>	<b>-2.21</b>	<b>2.023E-28</b>

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000019564	<i>Arid3a</i>	-2.19	7.423E-91
ENSMUSG00000037411	<i>Serpine1</i>	-2.18	1.451E-255
ENSMUSG00000026069	<i>Il1rl1</i>	-2.18	2.381E-39
ENSMUSG00000047501	<i>Cldn4</i>	-2.17	1.604E-32
ENSMUSG00000042436	<i>Mfap4</i>	-2.03	1.369E-37
ENSMUSG00000020325	<i>Fstl3</i>	-2.02	4.927E-42
ENSMUSG00000067158	<i>Col4a4</i>	-2.00	1.089E-74
ENSMUSG00000049699	<i>Ucn2</i>	-1.92	1.798E-21
ENSMUSG00000003283	<i>Hck</i>	-1.89	5.014E-12
ENSMUSG00000033722	<i>BC034090</i>	-1.80	2.775E-79
ENSMUSG00000019997	<i>Ctgf</i>	-1.71	3.342E-199
ENSMUSG00000025650	<i>Col7a1</i>	-1.70	5.813E-235
ENSMUSG00000030827	<i>Fgf21</i>	-1.69	3.520E-73
ENSMUSG00000032332	<i>Col12a1</i>	-1.67	7.540E-112
ENSMUSG00000009687	<i>Fxyd5</i>	-1.59	2.288E-20

**Table S2: Differentially expressed genes in Tg737<sup>orpk/orpk</sup> ECs: 2 vs. 30dynes/cm<sup>2</sup>**Genes in **bold** are cilia-independent regulated genes, also changed in wild-type ECs

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000052143	<i>Gm9869</i>	6.94	9.107E-07
ENSMUSG00000096001	<i>2610528A11Rik</i>	6.66	0.000E+00
ENSMUSG00000068122	<i>Agtr2</i>	6.20	1.627E-39
ENSMUSG00000020297	<i>Nsg2</i>	5.25	7.285E-30
ENSMUSG00000025488	<i>Cox8b</i>	4.67	7.148E-08
ENSMUSG00000027875	<i>Hmgcs2</i>	4.40	4.338E-94
ENSMUSG00000103344	<i>Gbp11</i>	4.30	2.596E-19
ENSMUSG00000038393	<i>Txnip</i>	4.22	0.000E+00
ENSMUSG00000026023	<i>Cdk15</i>	4.22	1.453E-14
<b>ENSMUSG00000037010</b>	<b><i>Apln</i></b>	<b>3.90</b>	<b>0.000E+00</b>
ENSMUSG00000105096	<i>Gbp10</i>	3.85	1.827E-39
ENSMUSG00000036295	<i>Lrrn3</i>	3.77	1.474E-190
ENSMUSG00000068874	<i>Selenbp1</i>	3.70	1.780E-17
ENSMUSG00000026894	<i>Morn5</i>	3.58	7.221E-09
ENSMUSG00000035258	<i>Abi3bp</i>	3.56	1.295E-70
ENSMUSG00000024810	<i>Il33</i>	3.51	2.514E-36
ENSMUSG00000019359	<i>Gdpd2</i>	3.49	3.574E-27
ENSMUSG00000079363	<i>Gbp4</i>	3.47	1.163E-112
ENSMUSG00000027996	<i>Sfrp2</i>	3.41	6.732E-34
ENSMUSG00000029298	<i>Gbp9</i>	3.39	0.000E+00
ENSMUSG00000060224	<i>Pyroxd2</i>	3.34	1.653E-47
ENSMUSG00000053199	<i>Arhgap20</i>	3.33	3.854E-289
ENSMUSG00000025784	<i>Clec3b</i>	3.30	9.026E-95
ENSMUSG00000074207	<i>Adh1</i>	3.29	2.488E-86
ENSMUSG00000004035	<i>Gstm7</i>	3.27	9.476E-19
ENSMUSG00000104713	<i>Gbp6</i>	3.25	6.290E-26
ENSMUSG00000039155	<i>Cdh26</i>	3.15	6.864E-104
ENSMUSG00000043073	<i>Usp17le</i>	3.11	1.305E-25
ENSMUSG00000052957	<i>Gas1</i>	3.09	0.000E+00
ENSMUSG00000041797	<i>Abca9</i>	3.07	3.773E-65
ENSMUSG00000039518	<i>Cdsn</i>	3.07	1.184E-249
ENSMUSG00000067780	<i>Pi15</i>	3.01	5.218E-103
ENSMUSG00000030406	<i>Gipr</i>	2.97	1.951E-13
ENSMUSG00000028713	<i>Cyp4b1</i>	2.97	3.667E-20
ENSMUSG00000034438	<i>Gbp8</i>	2.93	3.238E-193
ENSMUSG00000078566	<i>Bnip3</i>	2.92	0.000E+00
ENSMUSG00000019880	<i>Rspo3</i>	2.85	1.047E-301



Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000035042	<i>Ccl5</i>	2.80	2.275E-40
ENSMUSG00000022512	<i>Cldn1</i>	2.80	2.223E-73
ENSMUSG00000040253	<i>Gbp7</i>	2.80	3.810E-46
<b>ENSMUSG00000034459</b>	<b><i>Ifit1</i></b>	<b>2.78</b>	<b>3.792E-94</b>
ENSMUSG00000021872	<i>Rnase10</i>	2.73	4.961E-24
ENSMUSG00000038233	<i>Fam198a</i>	2.72	2.639E-27
ENSMUSG00000061082	<i>Plac1</i>	2.71	9.470E-11
ENSMUSG00000037206	<i>Islr</i>	2.68	2.705E-277
ENSMUSG00000041112	<i>Elmo1</i>	2.68	0.000E+00
ENSMUSG00000028270	<i>Gbp2</i>	2.67	6.640E-208
ENSMUSG00000037161	<i>Mgarp</i>	2.65	6.541E-18
ENSMUSG00000034810	<i>Scn7a</i>	2.65	2.158E-84
ENSMUSG00000059921	<i>Unc5c</i>	2.64	9.397E-311
ENSMUSG00000029167	<i>Ppargc1a</i>	2.61	1.413E-134
ENSMUSG00000036446	<i>Lum</i>	2.59	4.639E-138
ENSMUSG00000017446	<i>C1qtnf1</i>	2.58	9.769E-102
ENSMUSG00000029838	<i>Ptn</i>	2.58	0.000E+00
ENSMUSG00000073530	<i>Pappa2</i>	2.58	5.852E-82
ENSMUSG00000009246	<i>Trpm5</i>	2.56	5.212E-38
ENSMUSG00000037379	<i>Spon2</i>	2.52	5.362E-78
ENSMUSG00000037621	<i>Atoh8</i>	2.51	4.116E-27
ENSMUSG00000020644	<i>Id2</i>	2.42	1.534E-74
ENSMUSG00000049409	<i>Prokr1</i>	2.41	5.751E-61
ENSMUSG00000074794	<i>Arrdc3</i>	2.41	1.298E-124
ENSMUSG00000079580	<i>Tmem217</i>	2.39	3.164E-07
ENSMUSG00000028289	<i>Epha7</i>	2.37	9.740E-180
ENSMUSG00000030222	<i>Rerg</i>	2.37	9.340E-42
ENSMUSG00000024084	<i>Qpct</i>	2.36	2.581E-14
ENSMUSG00000046546	<i>Fam43a</i>	2.35	3.974E-121
ENSMUSG00000071047	<i>Ces1a</i>	2.31	5.534E-81
ENSMUSG00000006494	<i>Pdk1</i>	2.30	2.870E-257
ENSMUSG00000027408	<i>Cpxm1</i>	2.29	2.756E-81
ENSMUSG00000067276	<i>Capn6</i>	2.28	0.000E+00
ENSMUSG00000022883	<i>Robo1</i>	2.27	1.022E-47
ENSMUSG00000021806	<i>Nid2</i>	2.26	0.000E+00
ENSMUSG00000074604	<i>Mgst2</i>	2.24	6.825E-12
ENSMUSG00000037362	<i>Nov</i>	2.22	1.709E-245
ENSMUSG00000096727	<i>Psmb9</i>	2.21	1.153E-41
ENSMUSG00000001663	<i>Gstt1</i>	2.20	1.895E-27
ENSMUSG00000057346	<i>Apol9a</i>	2.20	1.005E-18

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000029371	<i>Cxcl5</i>	2.20	1.458E-27
ENSMUSG00000039031	<i>Arhgap18</i>	2.13	3.245E-117
ENSMUSG00000022758	<i>P2rx6</i>	2.13	4.055E-27
ENSMUSG00000015090	<i>Ptgds</i>	2.12	1.017E-36
ENSMUSG00000050359	<i>Sprrla</i>	2.06	1.962E-10
ENSMUSG00000022148	<i>Fyb</i>	2.06	4.640E-24
ENSMUSG00000005950	<i>P2rx5</i>	2.05	1.600E-28
ENSMUSG00000019768	<i>Esr1</i>	2.05	8.149E-62
ENSMUSG00000024066	<i>Xdh</i>	2.03	0.000E+00
ENSMUSG00000014782	<i>Plekhg4</i>	2.02	1.198E-273
ENSMUSG00000064373	<i>Sepp1</i>	2.00	4.159E-213
ENSMUSG00000025911	<i>Adhfe1</i>	2.00	7.057E-33
ENSMUSG00000032246	<i>Calml4</i>	1.99	2.684E-83
ENSMUSG00000039217	<i>Il18</i>	1.99	2.003E-15
<b>ENSMUSG00000074896</b>	<b><i>Ifit3</i></b>	<b>1.96</b>	<b>2.422E-13</b>
ENSMUSG00000032625	<i>Thsd7a</i>	1.93	0.000E+00
ENSMUSG00000033355	<i>Rtp4</i>	1.93	1.192E-13
ENSMUSG00000005360	<i>Slc1a3</i>	1.92	3.957E-135
ENSMUSG00000052160	<i>Pld4</i>	1.91	3.101E-09
ENSMUSG00000038527	<i>Clrl</i>	1.91	5.506E-121
ENSMUSG00000029380	<i>Cxcl1</i>	1.90	1.213E-28
ENSMUSG00000057596	<i>Trim30d</i>	1.90	3.625E-61
ENSMUSG00000057897	<i>Camk2b</i>	1.89	2.424E-23
ENSMUSG00000015243	<i>Abca1</i>	1.89	0.000E+00
ENSMUSG00000029563	<i>Foxp2</i>	1.89	1.720E-62
ENSMUSG00000037005	<i>Xpnp2</i>	1.89	3.230E-103
ENSMUSG00000029231	<i>Pdgfra</i>	1.88	7.336E-273
ENSMUSG00000003949	<i>Hlf</i>	1.88	6.467E-29
ENSMUSG00000022836	<i>Mylk</i>	1.88	7.587E-104
ENSMUSG00000045031	<i>Cetn4</i>	1.87	8.703E-06
ENSMUSG00000052921	<i>Arhgef15</i>	1.86	1.769E-20
ENSMUSG00000004558	<i>Ndr2</i>	1.85	9.398E-137
ENSMUSG00000028565	<i>Nfia</i>	1.85	4.073E-51
ENSMUSG00000029561	<i>Oasl2</i>	1.84	7.685E-21
ENSMUSG00000022707	<i>Gbe1</i>	1.84	1.378E-300
ENSMUSG00000028268	<i>Gbp3</i>	1.83	6.178E-14
ENSMUSG00000022537	<i>Tmem44</i>	1.82	2.679E-31
ENSMUSG00000030257	<i>Srgap3</i>	1.81	5.628E-159
ENSMUSG00000025931	<i>Paqr8</i>	1.80	5.568E-113
ENSMUSG00000025321	<i>Itgb8</i>	1.80	2.220E-140

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000022419	<i>Deptor</i>	1.80	5.475E-125
ENSMUSG00000054640	<i>Slc8a1</i>	1.78	8.617E-53
ENSMUSG00000020623	<i>Map2k6</i>	1.78	8.107E-28
ENSMUSG00000023064	<i>Sncg</i>	1.77	7.504E-05
ENSMUSG00000028359	<i>Orm3</i>	1.77	2.418E-08
ENSMUSG00000027832	<i>Ptx3</i>	1.77	2.854E-166
ENSMUSG00000049985	<i>Ankrd55</i>	1.77	2.822E-22
ENSMUSG00000026896	<i>Ifih1</i>	1.76	2.240E-38
ENSMUSG00000017417	<i>Plxdc1</i>	1.76	1.973E-170
ENSMUSG00000041688	<i>Amot</i>	1.75	0.000E+00
ENSMUSG00000024610	<i>Cd74</i>	1.75	4.024E-25
ENSMUSG00000024109	<i>Nrxn1</i>	1.74	2.547E-16
ENSMUSG00000053475	<i>Tnfrsf6</i>	1.74	4.753E-22
ENSMUSG00000040254	<i>Sema3d</i>	1.74	1.593E-78
<b>ENSMUSG00000022206</b>	<b><i>Npr3</i></b>	<b>1.73</b>	<b>1.327E-61</b>
ENSMUSG00000029096	<i>Htra3</i>	1.72	4.157E-28
ENSMUSG00000038146	<i>Notch3</i>	1.72	4.020E-219
ENSMUSG00000034855	<i>Cxcl10</i>	1.71	1.427E-12
ENSMUSG00000022032	<i>Scara5</i>	1.71	1.809E-75
ENSMUSG00000019899	<i>Lama2</i>	1.71	6.069E-43
ENSMUSG00000040428	<i>Plekha4</i>	1.71	3.420E-33
ENSMUSG00000041272	<i>Tox</i>	1.70	1.550E-60
ENSMUSG00000039814	<i>Xkr5</i>	1.70	6.364E-23
ENSMUSG00000022330	<i>Osr2</i>	1.69	1.658E-06
ENSMUSG00000035493	<i>Tgfb1</i>	1.69	1.044E-182
ENSMUSG00000003955	<i>Fam162a</i>	1.68	3.095E-293
ENSMUSG00000055782	<i>Abcd2</i>	1.68	2.387E-36
ENSMUSG00000021123	<i>Rdh12</i>	1.68	6.463E-18
ENSMUSG00000020911	<i>Krt19</i>	1.65	1.145E-105
ENSMUSG00000060063	<i>Alox5ap</i>	1.65	1.477E-06
ENSMUSG00000056870	<i>Gulp1</i>	1.65	1.933E-139
ENSMUSG00000052581	<i>Lrrtm4</i>	1.65	5.187E-90
ENSMUSG00000031380	<i>Figf</i>	1.64	2.599E-251
ENSMUSG00000036334	<i>Igsf10</i>	1.64	2.990E-153
ENSMUSG00000021591	<i>Glrx</i>	1.64	2.458E-56
ENSMUSG00000036109	<i>Mbnl3</i>	1.64	1.918E-16
ENSMUSG00000059013	<i>Sh2d3c</i>	1.64	1.714E-30
ENSMUSG00000039883	<i>Lrrc17</i>	1.63	2.480E-223
ENSMUSG00000006586	<i>Runx1t1</i>	1.63	1.364E-100
ENSMUSG00000025422	<i>Agap2</i>	1.63	3.098E-71

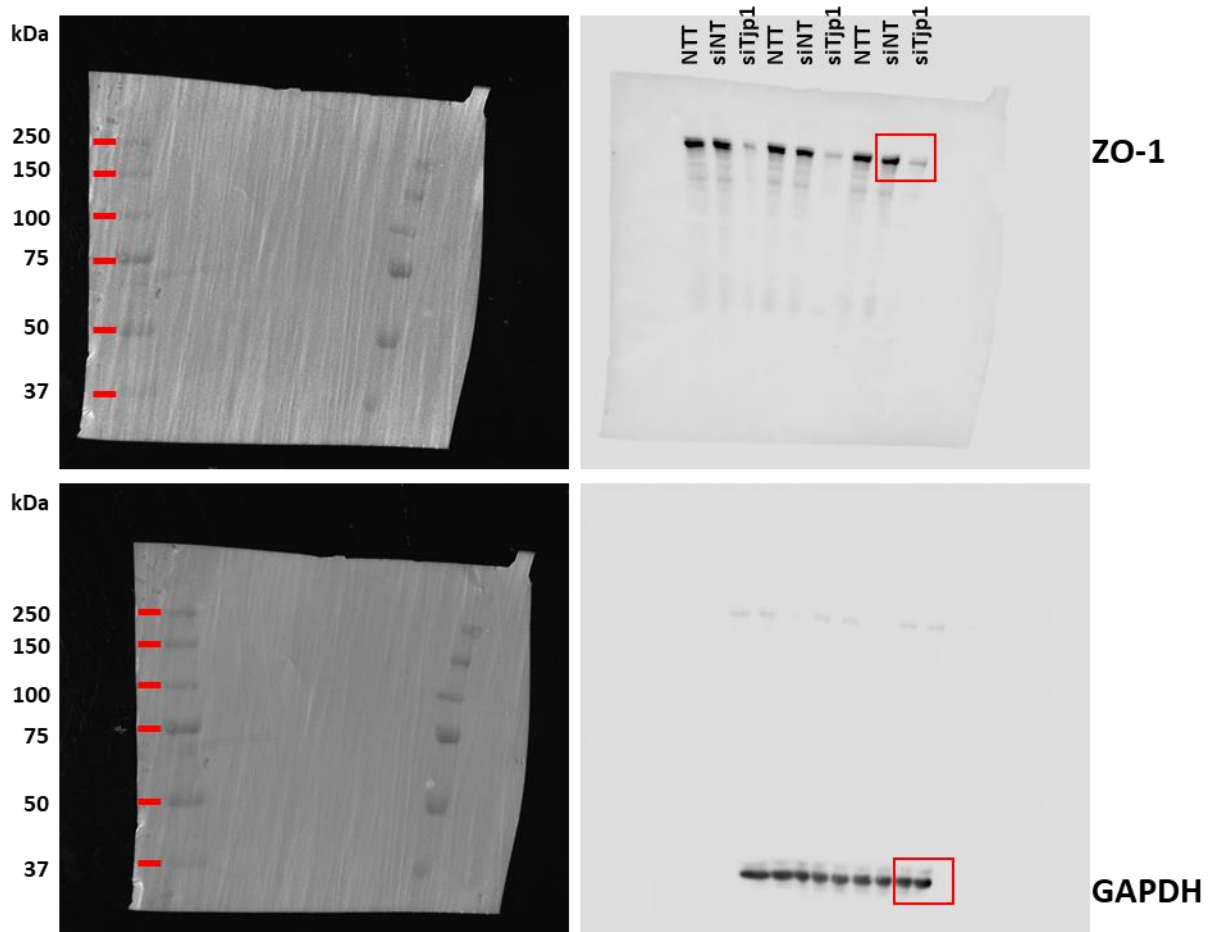
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ENSMUSG00000035692	<i>Isg15</i>	1.62	2.185E-38
ENSMUSG00000068762	<i>Gstm6</i>	1.62	1.843E-07
<b>ENSMUSG00000031980</b>	<b><i>Agt</i></b>	<b>1.62</b>	<b>2.535E-13</b>
ENSMUSG00000027217	<i>Tspan18</i>	1.61	2.463E-14
ENSMUSG00000019817	<i>Plagl1</i>	1.61	4.611E-71
ENSMUSG00000038319	<i>Kcnh2</i>	1.61	2.711E-84
ENSMUSG00000024338	<i>Psmb8</i>	1.61	2.971E-68
ENSMUSG00000031099	<i>Smarca1</i>	1.61	8.532E-67
ENSMUSG00000028555	<i>Ttc39a</i>	1.60	2.476E-16
ENSMUSG00000022548	<i>Apod</i>	1.59	1.623E-17
ENSMUSG00000039063	<i>Echdc3</i>	1.59	3.778E-17
ENSMUSG00000031618	<i>Nr3c2</i>	1.59	9.667E-81
ENSMUSG00000039519	<i>Cyp7b1</i>	1.59	2.961E-17
ENSMUSG00000022231	<i>Sema5a</i>	1.59	5.065E-136
ENSMUSG00000046275	<i>Tusc5</i>	-6.38	2.232E-62
ENSMUSG00000083282	<i>Ctsf</i>	-6.19	1.738E-34
ENSMUSG00000045545	<i>Krt14</i>	-5.12	5.084E-64
<b>ENSMUSG00000024910</b>	<b><i>Ctsw</i></b>	<b>-4.96</b>	<b>2.615E-282</b>
ENSMUSG00000031780	<i>Ccl17</i>	-4.61	4.735E-71
ENSMUSG00000021950	<i>Anxa8</i>	-4.22	0.000E+00
ENSMUSG00000024011	<i>Pi16</i>	-4.14	1.553E-229
ENSMUSG00000022596	<i>Slurp1</i>	-3.70	6.207E-150
<b>ENSMUSG00000037411</b>	<b><i>Serpine1</i></b>	<b>-3.45</b>	<b>0.000E+00</b>
ENSMUSG00000056498	<i>Tmem154</i>	-3.26	6.790E-49
ENSMUSG00000000489	<i>Pdgfb</i>	-3.26	1.045E-120
ENSMUSG00000038840	<i>Birc7</i>	-3.15	9.355E-37
ENSMUSG00000022096	<i>Hr</i>	-3.10	2.425E-59
ENSMUSG00000006014	<i>Prg4</i>	-3.07	1.700E-112
ENSMUSG00000030109	<i>Slc6a12</i>	-3.07	2.306E-45
ENSMUSG00000058914	<i>Clqtnf3</i>	-3.04	0.000E+00
ENSMUSG00000002020	<i>Ltbp2</i>	-3.02	0.000E+00
<b>ENSMUSG00000019997</b>	<b><i>Ctgf</i></b>	<b>-3.01</b>	<b>0.000E+00</b>
ENSMUSG00000026639	<i>Lamb3</i>	-2.94	5.987E-72
ENSMUSG00000032172	<i>Olfm2</i>	-2.93	8.143E-83
ENSMUSG00000048521	<i>Cxcr6</i>	-2.90	1.484E-17
ENSMUSG00000032487	<i>Ptgs2</i>	-2.86	0.000E+00
ENSMUSG00000004371	<i>Il11</i>	-2.84	1.997E-14
ENSMUSG00000073433	<i>Arhgdig</i>	-2.84	3.358E-14
ENSMUSG00000022018	<i>Rgcc</i>	-2.82	1.362E-15
ENSMUSG00000045777	<i>Ifitm10</i>	-2.79	9.615E-73

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000052316	<i>Lrrc15</i>	-2.75	2.225E-48
<b>ENSMUSG00000026414</b>	<b><i>Tnnt2</i></b>	<b>-2.69</b>	<b>1.071E-139</b>
<b>ENSMUSG00000079465</b>	<b><i>Col4a3</i></b>	<b>-2.69</b>	<b>4.576E-128</b>
<b>ENSMUSG00000038400</b>	<b><i>Pmepa1</i></b>	<b>-2.68</b>	<b>0.000E+00</b>
ENSMUSG00000044006	<i>Cilp2</i>	-2.64	1.437E-143
ENSMUSG00000027470	<i>Mylk2</i>	-2.58	3.450E-43
ENSMUSG00000031530	<i>Dusp4</i>	-2.55	0.000E+00
ENSMUSG00000021208	<i>Ifi2712b</i>	-2.54	1.551E-07
ENSMUSG00000023915	<i>Tnfrsf21</i>	-2.50	2.506E-102
ENSMUSG00000037225	<i>Fgf2</i>	-2.50	7.787E-191
ENSMUSG00000036256	<i>Igfbp7</i>	-2.50	0.000E+00
ENSMUSG00000028179	<i>Cth</i>	-2.50	1.129E-118
ENSMUSG00000031972	<i>Acta1</i>	-2.49	3.141E-101
ENSMUSG00000027737	<i>Slc7a11</i>	-2.48	0.000E+00
ENSMUSG00000054555	<i>Adam12</i>	-2.42	2.243E-259
ENSMUSG00000029765	<i>Plxna4</i>	-2.39	1.366E-245
ENSMUSG00000042124	<i>Lcelf</i>	-2.36	4.131E-05
ENSMUSG00000029019	<i>Nppb</i>	-2.32	4.195E-09
ENSMUSG00000020099	<i>Unc5b</i>	-2.32	0.000E+00
<b>ENSMUSG00000030827</b>	<b><i>Fgf21</i></b>	<b>-2.31</b>	<b>9.827E-19</b>
ENSMUSG00000000126	<i>Wnt9a</i>	-2.28	6.808E-108
ENSMUSG00000079014	<i>Serpina3i</i>	-2.28	5.402E-147
ENSMUSG00000022661	<i>Cd200</i>	-2.25	8.623E-263
ENSMUSG00000031841	<i>Cdh13</i>	-2.24	3.468E-217
<b>ENSMUSG00000046318</b>	<b><i>Ccbe1</i></b>	<b>-2.22</b>	<b>3.541E-43</b>
ENSMUSG00000024486	<i>Hbegf</i>	-2.21	8.345E-280
ENSMUSG00000020023	<i>Tmcc3</i>	-2.18	6.203E-164
ENSMUSG00000022240	<i>Ctnnd2</i>	-2.18	7.366E-149
ENSMUSG00000076441	<i>Ass1</i>	-2.17	6.351E-39
ENSMUSG00000037419	<i>Endod1</i>	-2.16	4.816E-302
ENSMUSG00000029223	<i>Uchl1</i>	-2.15	1.037E-267
ENSMUSG00000067001	<i>Serpinb7</i>	-2.15	2.334E-48
ENSMUSG00000063727	<i>Tnfrsf11b</i>	-2.14	3.515E-65
ENSMUSG00000054136	<i>Adm2</i>	-2.13	6.251E-64
<b>ENSMUSG00000031075</b>	<b><i>Ano1</i></b>	<b>-2.11</b>	<b>4.962E-166</b>
ENSMUSG00000044258	<i>Ctla2a</i>	-2.11	0.000E+00
ENSMUSG00000032715	<i>Trib3</i>	-2.11	4.199E-253
ENSMUSG00000000782	<i>Tcf7</i>	-2.10	9.162E-18
ENSMUSG00000037428	<i>Vgf</i>	-2.10	3.227E-24
<b>ENSMUSG00000009687</b>	<b><i>Fxyd5</i></b>	<b>-2.08</b>	<b>3.069E-277</b>

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000006221	<i>Hspb7</i>	-2.08	1.577E-84
ENSMUSG00000053062	<i>Jam2</i>	-2.06	2.009E-175
ENSMUSG00000020689	<i>Itgb3</i>	-2.04	1.447E-320
ENSMUSG00000039813	<i>Tbc1d2</i>	-2.04	1.011E-179
ENSMUSG00000020788	<i>Atp2a3</i>	-2.00	1.590E-38
ENSMUSG00000075012	<i>Fjx1</i>	-1.98	7.453E-49
ENSMUSG00000032415	<i>Ube2cbp</i>	-1.98	1.278E-37
ENSMUSG00000038264	<i>Sema7a</i>	-1.97	1.491E-22
ENSMUSG00000020846	<i>Fam101b</i>	-1.96	0.000E+00
ENSMUSG00000036687	<i>Tmem184a</i>	-1.96	8.522E-35
ENSMUSG00000028542	<i>Slc6a9</i>	-1.95	0.000E+00
ENSMUSG00000044254	<i>Pcsk9</i>	-1.91	1.939E-51
ENSMUSG00000022952	<i>Runx1</i>	-1.91	1.501E-192
ENSMUSG00000025068	<i>Gsto1</i>	-1.91	0.000E+00
ENSMUSG00000074676	<i>Foxs1</i>	-1.90	1.635E-64
ENSMUSG00000005124	<i>Wisp1</i>	-1.90	1.157E-204
ENSMUSG00000027456	<i>Sdcbp2</i>	-1.88	1.566E-08
ENSMUSG00000020614	<i>Fam20a</i>	-1.88	1.297E-152
ENSMUSG00000029161	<i>Cgrefl</i>	-1.87	1.219E-13
ENSMUSG00000072494	<i>Ppp1r3e</i>	-1.86	8.370E-14
ENSMUSG00000016918	<i>Sulf1</i>	-1.85	8.448E-312
ENSMUSG00000026494	<i>Kif26b</i>	-1.83	7.015E-89
ENSMUSG00000036181	<i>Hist1h1c</i>	-1.81	1.322E-49
ENSMUSG00000051669	<i>AU021092</i>	-1.80	1.838E-105
ENSMUSG00000027313	<i>Chac1</i>	-1.79	1.836E-149
ENSMUSG00000053846	<i>Lipg</i>	-1.78	1.740E-121
ENSMUSG00000051048	<i>P4ha3</i>	-1.76	8.983E-159
<b>ENSMUSG00000027750</b>	<b><i>Postn</i></b>	<b>-1.76</b>	<b>1.130E-227</b>
ENSMUSG00000032281	<i>Acsbg1</i>	-1.76	7.088E-64
ENSMUSG00000027397	<i>Slc20a1</i>	-1.75	0.000E+00
ENSMUSG00000022367	<i>Has2</i>	-1.74	3.372E-297
ENSMUSG00000036040	<i>Adamtsl2</i>	-1.74	1.279E-21
ENSMUSG00000026475	<i>Rgs16</i>	-1.73	3.475E-12
ENSMUSG00000032060	<i>Cryab</i>	-1.73	0.000E+00
ENSMUSG00000038244	<i>Mical2</i>	-1.72	0.000E+00
ENSMUSG00000024544	<i>Ldlrad4</i>	-1.72	2.176E-151
<b>ENSMUSG00000026069</b>	<b><i>Il1rl1</i></b>	<b>-1.72</b>	<b>1.841E-86</b>
ENSMUSG00000037370	<i>Enpp1</i>	-1.72	7.727E-46
ENSMUSG00000002847	<i>Pla1a</i>	-1.71	1.086E-13
ENSMUSG00000025140	<i>Pycr1</i>	-1.70	9.875E-190

Gene_id	Gene_name	Log <sub>2</sub> fold change	P-value
ENSMUSG00000001918	<i>Slc1a5</i>	-1.70	8.816E-209
ENSMUSG000000036390	<i>Gadd45a</i>	-1.67	9.520E-196
ENSMUSG000000030562	<i>Nox4</i>	-1.67	5.418E-66
ENSMUSG000000027656	<i>Wisp2</i>	-1.67	3.447E-235
ENSMUSG000000017724	<i>Etv4</i>	-1.67	2.920E-67
ENSMUSG000000026548	<i>Slamf9</i>	-1.66	9.054E-12
ENSMUSG000000029446	<i>Psph</i>	-1.66	6.715E-174
ENSMUSG000000022817	<i>Itgb5</i>	-1.65	0.000E+00
ENSMUSG000000014846	<i>Tppp3</i>	-1.65	2.236E-219
ENSMUSG000000032911	<i>Cspg4</i>	-1.64	1.281E-300
ENSMUSG000000068196	<i>Col8a1</i>	-1.64	3.165E-304
ENSMUSG000000006301	<i>Tmbim1</i>	-1.63	4.422E-299
ENSMUSG000000042622	<i>Maff</i>	-1.62	3.707E-177
ENSMUSG000000038508	<i>Gdf15</i>	-1.61	2.152E-08
ENSMUSG000000050222	<i>Il17d</i>	-1.60	1.157E-78
ENSMUSG000000074874	<i>Ctla2b</i>	-1.60	4.204E-46
ENSMUSG000000041120	<i>Nbl1</i>	-1.60	6.149E-236
ENSMUSG000000024529	<i>Lox</i>	-1.59	2.996E-242
ENSMUSG000000021260	<i>Hhip1l</i>	-1.59	2.947E-56

## Complete unedited gel for the cropped gel shown in Figure 3A



Representative cropped images shown in Figure 3A are highlighted in red. NTT (non-treated control), siNT (non-targeting control), siTjP1 (siRNA targeting TJP1/ZO-1).