

**S1 Table: RNAseq candidate gene list**

Gene name	Average counts			p <sub>adj</sub> values		
	AD-lacZ	ADKD	<i>Ildr2</i> <sup>Adv</sup> KO	ADKD vs. AD-lacZ	ADKD vs. <i>Ildr2</i> <sup>Adv</sup> KO	AD-lacZ vs. <i>Ildr2</i> <sup>Adv</sup> KO
<i>Rps19bp1</i>	276	66	267	6.98E-28	6.49E-18	0.199
<i>Slc39a1</i>	1314	422	1524	2.18E-26	1.42E-31	1.000
<i>Slc27a4</i>	1167	473	1504	3.05E-23	1.04E-08	0.666
<i>Aldh4a1</i>	5277	2521	6117	3.63E-19	9.96E-05	1.000
<i>Ndst1</i>	3091	1464	3079	8.28E-19	1.37E-10	0.127
<i>Ppp1ca</i>	3562	1720	4107	4.12E-18	1.20E-15	0.956
<i>Rab1b</i>	3043	1523	3700	4.45E-16	3.10E-16	0.882
<i>2900097C17Rik</i>	1326	662	1417	2.73E-14	5.36E-10	0.478
<i>Ptp4a1</i>	529	246	558	4.76E-13	1.85E-06	0.463
<i>6330578E17Rik</i>	2685	1434	2716	5.05E-13	2.98E-07	0.174
<i>Tbc1d13</i>	852	426	1090	1.00E-12	5.29E-15	0.571
<i>Ubf1</i>	972	494	1155	1.28E-12	3.30E-12	1.000
<i>Gm98</i>	1354	708	1630	1.54E-12	1.30E-12	0.948
<i>Tmem123</i>	1090	563	1404	2.37E-12	5.18E-15	0.520
<i>Nt5dc2</i>	336	151	374	1.68E-11	2.06E-09	0.819
<i>Neo1</i>	671	345	676	7.21E-11	1.09E-05	0.224
<i>Sumf2</i>	291	135	290	9.58E-10	8.90E-06	0.283
<i>Acpl2</i>	266	124	338	4.16E-09	9.22E-11	0.711
<i>Pcgf2</i>	181	79	210	2.44E-08	2.32E-04	1.000
<i>Cpsf2</i>	783	448	841	4.44E-08	9.82E-06	0.539
<i>Wfdc2</i>	201	59	190	5.30E-08	6.97E-09	0.260
<i>Ccdc50</i>	1569	946	2019	7.78E-08	1.72E-10	0.518
<i>Tspan4</i>	626	359	772	1.70E-07	1.80E-04	0.876
<i>Reck</i>	81	27	87	4.09E-07	6.94E-06	0.776
<i>Pef1</i>	1057	642	1345	4.99E-07	3.00E-09	0.599
<i>Scpep1</i>	1018	618	1254	5.33E-07	2.74E-08	0.814
<i>Diablo</i>	560	326	548	7.33E-07	2.44E-03	0.148
<i>Icmt</i>	1088	675	1172	1.65E-06	1.36E-04	0.535
<i>Celf1</i>	3216	2074	3415	1.96E-06	4.12E-04	0.405
<b><i>Dgka</i></b>	<b>160</b>	<b>75</b>	<b>187</b>	<b>2.38E-06</b>	<b>1.57E-06</b>	<b>1.000</b>
<i>Ssu72</i>	986	613	1306	2.66E-06	1.26E-09	0.360

<i>Stat6</i>	1590	1019	1825	4.42E-06	1.33E-05	0.946
<i>Chtf8</i>	1247	792	1459	4.68E-06	5.19E-06	1.000
<i>Dpp8</i>	1734	1118	1816	5.03E-06	1.21E-03	0.352
<i>lpo5</i>	1941	1256	2423	5.06E-06	2.05E-04	0.748
<i>Snx4</i>	802	500	980	6.65E-06	6.53E-07	0.884
<i>1810011010Rik</i>	785	491	927	7.77E-06	4.37E-06	1.000
<i>Trappc9</i>	395	232	451	8.09E-06	2.62E-05	0.930
<i>Erp29</i>	949	602	1228	8.70E-06	2.19E-08	0.489
<i>Eif3h</i>	2005	1332	2224	2.32E-05	3.12E-04	0.712
<i>Pja2</i>	1062	693	1459	3.17E-05	1.63E-09	0.191
<i>Arl4d</i>	531	312	756	4.58E-05	8.90E-05	0.370
<i>Cdt1</i>	233	121	366	5.32E-05	6.90E-05	0.207
<i>Rab34</i>	205	97	260	6.48E-05	3.52E-09	0.749
<i>Pogk</i>	155	82	225	7.69E-05	6.56E-09	0.216
<i>Gtf3c1</i>	1771	1062	1764	9.27E-05	1.34E-03	0.140
<i>Pofut1</i>	410	255	540	1.02E-04	2.24E-07	0.454
<i>Atr</i>	601	389	716	1.29E-04	8.64E-05	1.000
<i>Tbc1d20</i>	807	534	894	1.38E-04	1.04E-03	0.733
<i>Rpa2</i>	295	155	341	1.44E-04	6.00E-04	1.000
<i>Nol3</i>	24	4	36	1.49E-04	1.04E-07	0.533
<i>Psm14</i>	1404	955	1472	1.54E-04	9.94E-03	0.359
<i>Tax1bp3</i>	72	30	82	1.58E-04	2.18E-04	0.969
<i>Tab2</i>	1916	1221	2563	1.77E-04	2.59E-10	0.272
<i>Cenpm</i>	148	62	167	1.77E-04	6.02E-07	0.915
<i>Adss</i>	1756	1163	2309	1.97E-04	5.07E-04	0.602
<i>Zdhhc2</i>	178	74	216	1.97E-04	2.57E-04	1.000
<i>Ern1</i>	836	554	886	2.51E-04	5.07E-03	0.454
<i>Sox12</i>	129	68	142	2.55E-04	3.50E-03	0.850
<i>Slc4a4</i>	3541	2086	3876	2.74E-04	5.33E-07	0.621
<i>Setd8</i>	1595	1039	1698	2.80E-04	1.04E-03	0.440
<i>S100a16</i>	385	245	425	2.90E-04	1.66E-03	0.753
<i>Rassf5</i>	334	210	429	3.19E-04	4.41E-06	0.623
<i>Tmem189</i>	331	208	364	3.42E-04	1.95E-03	0.751
<i>Plod3</i>	447	290	618	3.49E-04	6.00E-08	0.220
<i>Scn8a</i>	38	12	46	4.04E-04	1.18E-04	1.000
<i>Pcnxl3</i>	1147	795	1261	5.32E-04	4.14E-03	0.677
<i>Akap11</i>	1114	771	1316	5.49E-04	2.44E-04	1.000

<i>2310022B05Rik</i>	445	291	599	5.60E-04	5.46E-07	0.336
<i>Vps39</i>	584	391	754	5.91E-04	4.03E-06	0.543
<i>Nacc1</i>	1123	783	1361	7.35E-04	9.58E-05	0.911
<i>Zswim7</i>	182	107	196	7.37E-04	5.19E-03	0.680
<i>Entpd5</i>	11076	7174	13493	7.81E-04	9.33E-08	0.877
<i>Ass1</i>	4516	2710	8270	8.68E-04	2.85E-03	0.133
<i>Pip4k2c</i>	656	449	870	9.94E-04	1.80E-06	0.382
<i>Dguok</i>	231	144	250	1.15E-03	6.84E-03	0.693
<i>Hfe</i>	1107	783	1321	1.41E-03	4.08E-04	1.000
<i>Atg16l2</i>	212	133	238	2.03E-03	3.74E-03	0.892
<i>P4hb</i>	21192	15697	28758	2.26E-03	1.49E-05	0.181
<i>Ctsz</i>	4039	2972	4668	2.40E-03	2.43E-03	0.977
<i>P4ha2</i>	131	59	153	2.61E-03	2.92E-03	1.000
<i>Slc34a2</i>	47	13	38	2.86E-03	6.03E-03	0.350
<i>Nle1</i>	85	45	123	3.35E-03	5.77E-06	0.358
<i>Grina</i>	3684	2736	4162	3.76E-03	8.64E-03	0.835
<i>Gnl3l</i>	445	311	630	5.38E-03	8.05E-07	0.155
<i>Unc13b</i>	258	132	309	5.41E-03	3.97E-06	0.998
<i>Tesk1</i>	476	333	563	5.89E-03	1.98E-03	1.000
<i>Mcm3</i>	371	248	546	6.06E-03	4.12E-03	0.346
<i>Maged1</i>	2143	1603	2458	6.93E-03	8.08E-03	0.938
<i>Frmd8</i>	522	359	738	6.97E-03	1.74E-07	0.139
<i>Eaf1</i>	1713	1276	2136	7.07E-03	7.08E-04	0.725
<i>Inpp1</i>	1205	890	1596	7.12E-03	1.70E-05	0.351
<i>4732418C07Rik</i>	478	338	563	7.12E-03	3.10E-03	1.000
<i>Slk</i>	1319	980	1676	8.11E-03	1.49E-04	0.606
<i>Comtd1</i>	99	57	151	8.13E-03	1.72E-06	0.163
<i>Dock8</i>	823	553	1011	8.68E-03	1.93E-05	0.848
<i>Pdia4</i>	4016	2883	4695	8.70E-03	5.53E-04	1.000
<i>Echdc3</i>	948	700	1165	9.08E-03	7.53E-04	0.828
<i>Galns</i>	352	246	490	9.20E-03	6.04E-06	0.228
<i>1110008P14Rik</i>	390	275	474	9.37E-03	1.52E-03	0.928
<i>Edem1</i>	3313	2515	4237	9.87E-03	1.16E-04	0.533
<i>AI597479</i>	322	223	410	9.87E-03	3.30E-04	0.684