

**Table S2.** Transcript abundance changes at ion channel genes in forebrains of post-seizures Scn8a D/+ mice.

<b>Gene</b>	<b>Channel</b>	<b>log2FoldCha</b>	<b>fold change</b>	<b>IfcSE</b>	<b>stat</b>	<b>pvalue</b>	<b>padj</b>
<i>Voltage-gated sodium channels</i>							
Scn1a	Nav1.1	0.025	1.0	0.191	0.130	0.897	1.0
Scn1b	Navβ1	-0.168	-0.90	0.229	-0.731	0.465	0.745
Scn2a	Nav1.2	0.083	1.1	0.291	0.287	0.774	0.9
Scn2b	Navβ2	-0.574	-0.7	0.282	-2.035	0.042	0.215
Scn3a	Nav1.3	0.277	1.2	0.245	1.130	0.258	0.6
Scn3b	Navβ3	-0.004	-1.0	0.137	-0.029	0.977	0.992
Scn4a	Nav1.4	0.334	1.3	0.278	1.199	0.230	NA
Scn4b	Navβ4	-0.511	-0.7	0.216	-2.366	0.018	0.132
Scn5a	Nav1.5	0.518	1.4	0.307	1.686	0.092	0.3
Scn8a	Nav1.6	0.041	1.0	0.295	0.140	0.888	1.0
Scn9a	Nav1.7	-0.161	-1.1	0.307	-0.523	0.601	0.8
Scn10a	Nav1.8	0.774	1.7	0.359	2.155	0.031	0.2
Scn11a	Nav1.9	1.109	2.2	0.358	3.102	0.002	0.0
<i>Voltage-gated calcium channels</i>							
Cacna1s	Cav1.1	-0.237	-1.2	0.359	-0.661	0.509	0.8
Cacna1c	Cav1.2	0.314	1.2	0.270	1.163	0.245	0.6
Cacna1d	Cav1.3	0.217	1.2	0.170	1.277	0.202	0.5
Cacna1f	Cav1.4	-0.138	-1.1	0.351	-0.392	0.695	0.9
Cacna1a	Cav2.1	0.226	1.2	0.240	0.943	0.345	0.7
Cacna1b	Cav2.2	0.204	1.2	0.240	0.850	0.395	0.7
Cacna1e	Cav2.3	0.168	1.1	0.310	0.543	0.587	0.8
Cacna1g	Cav3.1	0.562	1.5	0.253	2.226	0.026	0.2
Cacna1h	Cav3.2	0.203	1.2	0.178	1.139	0.255	0.6
Cacna1i	Cav3.3	-0.165	-1.1	0.290	-0.571	0.568	0.8
<i>Voltage-gated potassium channels</i>							
Kcn1	Kv1.1	0.565	1.5	0.225	2.519	0.012	0.1
Kcn2	Kv1.2	0.119	1.1	0.298	0.399	0.690	0.9
Kcn3	Kv1.3	0.161	1.1	0.328	0.492	0.623	0.8
Kcn4	Kv1.4	-0.295	-1.2	0.294	-1.004	0.316	0.6
Kcn5	Kv1.5	0.410	1.3	0.272	1.509	0.131	0.4
Kcn6	Kv1.6	-0.492	-1.4	0.270	-1.823	0.068	0.3
Kcn7	Kv1.7	0.102	1.1	0.221	0.464	0.643	NA
Kcn10	Kv1.8	-0.015	-1.0	0.118	-0.130	0.896	NA
Kcnb1	Kv2.1	0.299	1.2	0.242	1.235	0.217	0.5
Kcnb2	Kv2.2	-0.260	-1.2	0.313	-0.830	0.406	0.7
Kcnc1	Kv3.1	-0.105	-1.1	0.244	-0.433	0.665	0.9
Kcnc2	Kv3.2	0.029	1.0	0.260	0.112	0.911	1.0
Kcnc3	Kv3.3	0.095	1.1	0.194	0.491	0.623	0.8
Kcnc4	Kv3.4	-0.137	-1.1	0.141	-0.972	0.331	0.6
Kcnd1	Kv4.1	0.293	1.2	0.283	1.036	0.300	0.6
Kcnd2	Kv4.2	-0.007	-1.0	0.242	-0.027	0.978	1.0
Kcnd3	Kv4.3	0.340	1.3	0.222	1.535	0.125	0.4
Kcnf1	Kv5.1	-0.199	-1.0	0.192	-1.037	0.300	0.6
Kcng1	Kv6.1	-1.291	-2.4	0.251	-5.151	0.000	0.0
Kcng2	Kv6.2	-0.262	-1.2	0.333	-0.787	0.431	0.7
Kcng3	Kv6.3	0.570	1.5	0.353	1.614	0.107	0.4
Kcng4	Kv6.4	-0.549	-1.5	0.273	-2.007	0.045	0.2
Kcnq1	Kv7.1	0.496	1.4	0.356	1.393	0.164	0.5
Kcnq2	Kv7.2	0.336	1.3	0.232	1.449	0.147	0.4
Kcnq3	Kv7.3	-0.010	-1.0	0.283	-0.037	0.971	1.0
Kcnq4	Kv7.4	-0.404	-1.3	0.213	-1.900	0.057	0.3
Kcnq5	Kv7.5	0.027	1.0	0.178	0.150	0.881	1.0
Kcnv1	Kv8.1	-0.334	-1.3	0.253	-1.321	0.187	0.5
Kcnv2	Kv8.2	0.050	1.0	0.284	0.177	0.860	NA
Kcns1	Kv9.1	-0.387	-1.3	0.248	-1.562	0.118	0.4
Kcns2	Kv9.2	0.050	1.0	0.278	0.181	0.857	0.9
Kcns3	Kv9.3	-0.204	-1.2	0.231	-0.880	0.379	0.7
Kcnh1	Kv10.1	0.362	1.3	0.248	1.464	0.143	0.4
Kcnh5	Kv10.2	0.107	1.1	0.336	0.319	0.750	0.9
Kcnh2	Kv11.1	0.343	1.3	0.186	1.844	0.065	0.3
Kcnh6	Kv11.2	-0.404	-1.3	0.286	-1.412	0.158	0.4
Kcnh7	Kv11.3	-0.328	-1.3	0.295	-1.112	0.266	0.6
Kcnh8	Kv12.1	0.206	1.2	0.318	0.648	0.517	NA
Kcnh3	Kv12.2	-0.457	-1.4	0.128	-3.581	0.000	0.0
Kcnh4	Kv12.3	-1.536	-2.9	0.248	-6.181	0.000	0.0