

#607208 EPILEPTIC ENCEPHALOPATHY, EARLY INFANTILE, 6; EIEE6

OMIM Gene ID	HGNC	UniProtAC
182389	SCN1A	P35498
603415	SCN9A	Q15858

Table 1: OMIM - UniProtAC mapping

Legend

- N1: #input proteins associated to the significant GO term
- N2: #proteins associated to the significant GO term
- P-value: Bonferroni-corrected p-value of Fisher's exact test
- *red*: go terms not related to the input proteins
- *blue*: go terms related to the input proteins (enriched uniquely by network-based method)
- *green*: go terms ancestors of terms enriched with the standard method (enriched uniquely by network-based method)

1 Standard enrichment

GO Term	N1	N2	P-value	Description
GO:0019228	2	34	4.56835e-05	neuronal action potential
GO:0086010	2	40	6.3517e-05	membrane depolarization during action potential
GO:0001508	2	83	0.000277114	action potential
GO:0035725	2	140	0.000792338	sodium ion transmembrane transport
GO:0051899	2	148	0.000885822	membrane depolarization
GO:0006814	2	233	0.00220095	sodium ion transport
GO:0042391	2	353	0.00505922	regulation of membrane potential
GO:0034765	2	424	0.00730255	regulation of ion transmembrane transport
GO:0034762	2	437	0.00775773	regulation of transmembrane transport
GO:0044708	2	596	0.0144388	single-organism behavior
GO:0043269	2	721	0.0211366	regulation of ion transport
GO:0015672	2	743	0.022447	monovalent inorganic cation transport
GO:0007610	2	806	0.0264178	behavior
GO:0098662	2	848	0.0292446	inorganic cation transmembrane transport
GO:0019227	1	11	0.0338031	neuronal action potential propagation
GO:0050884	1	12	0.0368756	neuromuscular process controlling posture
GO:0098660	2	995	0.0402695	inorganic ion transmembrane transport
GO:0030001	2	1036	0.0436583	metal ion transport
GO:0098655	2	1072	0.0467467	cation transmembrane transport

Table 2: Overrepresented GO terms with the standard enrichment

2 Network-based enrichment

GO Term	N1	N2	P-value	Description
GO:0086046	1	7	0.02185	membrane depolarization during SA node cell action potential
GO:0086014	1	16	0.0499362	atrial cardiac muscle cell action potential

Table 3: Overrepresented terms with the network-based enrichment. Only terms not detected with the standard method.