

**Supplementary table 1:** Cell type specific markers in GLT1<sup>+</sup>/Gfap-GFP<sup>+/-</sup> cells

Gene Title	Gene symbol	GLT1 <sup>+</sup> /Gfap-GFP <sup>+</sup>		GLT1 <sup>+</sup> /Gfap-GFP <sup>-</sup>		Probe Set ID
		P-value	Ratio	P-value	Ratio	
<b>Astrocytes</b>						
Aquaporin 4	<i>Aqp4</i>	0.0065	6.67±0.17	0.0038	5.65±0.14	1434449_at
Aquaporin 9	<i>Aqp9</i>	0.0298	4.73±0.16	0.0230	4.01±0.32	1424011_at
Glial fibrillary acidic protein	<i>Gfap</i>	0.0044	7.35±1.17		1.98±2.98	1440142_s_at
S100 protein, beta polypeptide	<i>S100b</i>	0.0010	5.14±0.22	0.0012	4.85±0.51	1434342_at
Solute carrier family 1, 2 (GLT1)	<i>Slc1a2</i>	0.0017	6.34±0.04	0.0012	5.58±0.39	1458314_at
Tenascin C	<i>Tnc</i>		2.68±0.78		0.80±1.47	1416342_at
<b>Progenitor</b>						
Achaete-scute complex -like 1	<i>Ascl1</i>		-1.99±1.63	0.0191	-2.80±0.78	1437086_at
Chondroitin sulfate proteoglycan 4 (NG2)	<i>Cspg4</i>	0.0007	-5.36±0.30	0.0021	-4.65±0.81	1423341_at
Doublecortin	<i>Dcx</i>		-1.98±0.97	0.0329	-1.69±0.44	1418139_at
Hairy and enhancer of split 1	<i>Hes1</i>		-0.87±0.34	0.0230	-0.82±0.14	1418102_at
Nestin	<i>Nes</i>	0.0185	-3.81±0.97	0.0094	-2.80±0.75	1418289_at
SRY-box containing gene 2	<i>Sox2</i>	0.0007	4.54±0.22	0.0007	3.65±0.32	1416967_at
Platelet derived growth factor receptor, alpha	<i>Pdgfra</i>		-5.47±2.77	0.0244	-3.30±1.26	1421917_at
Oligodendrocyte transcription factor 1	<i>Olig1</i>	0.0356	2.07±0.36	0.0026	3.54±0.20	1416149_at
Oligodendrocyte transcription factor 2	<i>Olig2</i>	0.0312	2.42±0.82	0.0028	3.25±0.63	1416232_at
<b>Microglial</b>						
CD68 antigen	<i>Cd68</i>	0.0225	-3.59±1.01	0.0094	-1.36±0.26	1449164_at
CD86 antigen	<i>Cd86</i>	0.0476	-4.53±1.80	0.0178	-2.03±0.46	1420404_at
Integrin alpha M	<i>Itgam</i>		-0.59±0.80		-1.06±1.56	1422046_at
<b>Neuron</b>						
ELAV like 4 (Hu antigen D)	<i>Elavl4</i>		-1.21±0.42	0.0969	-1.48±0.78	1452894_at
Neurofilament, heavy polypeptide	<i>Nefh</i>		-0.72±1.71		-0.31±1.96	1424847_at
Tubulin, alpha 1	<i>Tubal1</i>		-0.17±0.28	0.0363	0.33±0.03	1418884_x_at

Gene Title	Gene symbol	GLT1 <sup>+</sup> /Gfap-GFP <sup>+</sup>		GLT1 <sup>+</sup> /Gfap-GFP <sup>-</sup>		Probe Set ID
		P-value	Ratio	P-value	Ratio	
<b>Oligodendrocyte</b>						
Cyclic nucleotide phosphodiesterase 1	<i>Cnp1</i>	0.0410	0.84±0.27	0.0005	2.65±0.11	1418980_a_at
Myelin and lymphocyte protein	<i>Mal</i>	0.0037	-2.23±0.12	0.0057	1.46±0.23	1432558_a_at
Myelin basic protein	<i>Mbp</i>		-1.33±0.78		0.83±0.46	1425264_s_at
Myelin-associated oligodendrocytic basic protein	<i>Mobp</i>		-0.65±0.71	0.0012	2.61±0.29	1450088_a_at
<b>Endothelial and smooth muscle cell</b>						
Cadherin 5	<i>Cdh5</i>		-1.79±1.46		-2.06±1.51	1433956_at
CD34 antigen	<i>Cd34</i>	0.0039	-4.93±0.71	0.0005	-3.82±0.19	1416072_at
Von Willebrand factor	<i>Vwf</i>	0.0153	-3.55±0.69	0.0026	-3.22±0.26	1435386_at
Actin, alpha 2, smooth muscle	<i>Acta2</i>	0.0103	-5.80±1.26	0.0006	-5.24±0.49	1416454_s_at

In each group there were three independent biological samples. All data was MAS5 normalized, filtered and log-normalized. Each group was baselined to the GLT1<sup>-</sup>/Gfap-GFP<sup>-</sup> group. If there were several probesets available for one marker gene, the most significant probeset is presented here. P-value = non-paired Student's t-test with Benjamini-Hochberg FDR correction. Ratio = the ratio between GLT1<sup>+</sup>/Gfap-GFP<sup>+/-</sup> (n = 6) and GLT1<sup>-</sup>/Gfap-GFP<sup>-</sup> (n = 3) (mean±STDV).