

S1 Table:**Gene expression analysis in the somatosensory cortex**

CS	CS-US	
<i>Mean ± SEM, N</i>	<i>Mean ± SEM, N</i>	<i>t ,df</i>

Astrocyte Neuron Lactate Shuttle

Ldha	1.000 ± 0.088 N=7	1.067 ± 0.072 N=8	t=0.593, df=13
Ldhb	1.000 ± 0.095 N=7	1.184 ± 0.084 N=8	t=1.455, df=13
MCT1	1.000 ± 0.044 N=7	0.986 ± 0.030 N=8	t=0.276, df=13
MCT2	1.000 ± 0.056 N=7	0.922 ± 0.031 N=8	t=1.258, df=13
MCT4	1.000 ± 0.080 N=7	0.990 ± 0.059 N=8	t=0.100, df=13
Glut1	1.000 ± 0.062 N=7	0.980 ± 0.031 N=8	t=0.306, df=13
Glut3	1.000 ± 0.073 N=7	1.066 ± 0.090 N=8	t=0.556, df=13
Na/K alpha2	1.000 ± 0.039 N=7	0.898 ± 0.082 N=8	t=1.074, df=13