

**Additional File 3.** Pearson's correlation analyses for possible relationships between gene expression levels in BA24 astrocytes and age, RNA quality (RIN) and postmortem interval (PMI).

<b>Gene<sup>a</sup> (protein<sup>b</sup>)</b>	<b>Statistic</b>	<b>Age</b>	<b>RIN</b>	<b>PMI</b>
<i>RNA18S / GAPDH<sup>c</sup></i>	Pearson Correlation	.074	.119	.443
	Sig. (2-tailed)	.786	.662	.085
	N	16	16	16
<i>GRIN1 (NR1)</i>	Pearson Correlation	.092	.133	-.003
	Sig. (2-tailed)	.736	.624	.991
	N	16	16	16
<i>GRIN2A (NR2A)</i>	Pearson Correlation	.282	.516	-.116
	Sig. (2-tailed)	.290	.041	.670
	N	16	16	16
<i>GRIN2B (NR2B)</i>	Pearson Correlation	.523	.520	-.060
	Sig. (2-tailed)	.038	.039	.826
	N	16	16	16
<i>GRIN2D (NR2D)</i>	Pearson Correlation	.547	.395	.227
	Sig. (2-tailed)	.028	.130	.398
	N	16	16	16
<i>GRIA1 (GluR-1)</i>	Pearson Correlation	-.046	.490	.009
	Sig. (2-tailed)	.865	.054	.975
	N	16	16	16
<i>GRM5 (mGluR5)</i>	Pearson Correlation	.577	.328	.112
	Sig. (2-tailed)	.019	.216	.679
	N	16	16	16
<i>SLC1A3 (EAAT1)</i>	Pearson Correlation	-.340	-.238	-.344
	Sig. (2-tailed)	.197	.375	.192
	N	16	16	16
<i>SLC1A2 (EAAT2)</i>	Pearson Correlation	-.101	.023	-.186
	Sig. (2-tailed)	.711	.932	.491
	N	16	16	16
<i>SLC17A7 (vGlut1)</i>	Pearson Correlation	-.470	.214	-.655 <sup>d</sup>
	Sig. (2-tailed)	.066	.426	.006
	N	16	16	16
<i>GRIP1 (GRIP1)</i>	Pearson Correlation	-.086	-.146	.378
	Sig. (2-tailed)	.751	.590	.149
	N	16	16	16
<i>BDNF (BDNF)</i>	Pearson Correlation	.479	-.153	.492
	Sig. (2-tailed)	.060	.571	.053
	N	16	16	16
<i>NTRK2 (NTRK2, TrkB)</i>	Pearson Correlation	.711 <sup>d</sup>	.123	.187
	Sig. (2-tailed)	.002	.649	.488
	N	16	16	16

<sup>a</sup> Derived from the HUGO gene nomenclature committee responsible for designating unique gene names (Wain et al., 2002).

<sup>b</sup> Official protein nomenclature showing both the recommended and alternative protein names (Uniprot, 2008).

<sup>c</sup> Ratio of the two reference genes; all other expression data are normalized to the average of these two reference genes.

<sup>d</sup> Correlation is significant at  $p < 0.01$  (2-tailed).