Supplemental Figures

**Fig S1** The expression of surface and total NMDAR subunits NR1, NR2A, and NR2B are not significantly different in cultured cortical neurons (DIV14) between WT and NR3A KO mice.

(A)  
(B)  
(C)  

**Fig S2** The expression of NMDAR subunits NR1, NR2A, and NR2B in the PSD fraction of forebrain is not significantly different between young WT and NR3A KO mice.

(A)  
(B)  
(C)  

**Fig S3** The expression of surface and total NMDAR subunits NR1, NR2A, and NR2B are not significantly different in cultured cortical neurons (DIV14) between WT and NR3A TG mice.

(A)  
(B)  
(C)  

**Fig S4** The expression of NMDAR subunits NR1, NR2A, and NR2B in the PSD fraction of forebrain is not significantly different between adult WT and NR3A TG mice.
Fig S1. Surface and total expression of NR1, NR2A, and NR2B subunits in cultured cerebrocortical neurons prepared from NR3A KO and WT mice. (A) Biotin-labeled surface proteins and (B) total lysates from cultured cortical neurons (DIV14) were prepared and subjected to immunoblotting using antibodies against NR1, NR2A, NR2B, NR3A, or tubulin as indicated. (C) Quantification of surface and total NR1, NR2A, and NR2B proteins. For surface protein, the mean intensity of immunoreactive bands from WT cultures for each NR subunit was normalized to 1. For total protein, the intensity of each NR subunit was normalized to that of tubulin, and then the relative intensities of WT bands were calculated as 1. There was no significant difference between WT ($n = 4$) and NR3A KO ($n = 4$) mice for the levels of NR1, NR2A, or NR2B proteins expressed on the surface or in lysates.

Fig S2. Expression levels of NR1, NR2A, and NR2B in the PSD fraction of forebrain prepared from WT and NR3A KO mice at P7. (A) Immunoblots of PSD fractions prepared from NR3A KO and WT forebrain using antibodies against NR1, NR2A, NR2B, NR3A, and tubulin. (B) Quantification of NR1, NR2A, and NR2B immunoreactive bands. The intensities of these bands were normalized to anti-tubulin and then quantified relative to control. There was no significant difference between WT ($n = 5$) and NR3A KO mice ($n = 3$) in the levels of NR1, NR2A, or NR2B.

Fig S3. Surface and total expression of NR1, NR2A, and NR2B subunits in cultured cerebrocortical neurons from NR3A transgenic (TG) and WT mice. (A) Biotin-labeled surface protein and (B) total protein from cultured cortical neurons (DIV14) were prepared and subjected to immunoblotting using antibodies against NR1, NR2A, NR2B, NR3A, or tubulin, as indicated. (C) Quantification of surface and total NR1, NR2A, and NR2B subunit protein. There was no significant difference between WT ($n = 3$) and NR3A TG mice ($n = 3$) in the levels of NR1, NR2A, or NR2B proteins.

Fig S4. Expression levels of NR1, NR2A, and NR2B subunits in the PSD fraction of forebrain prepared from adult WT and NR3A TG mice. (A) Immunoblots of PSD fractions prepared from adult NR3A TG and WT forebrain using antibodies against NR1, NR2A, NR2B, NR3A, and tubulin. (B) Quantification of NR1, NR2A, and NR2B immunoreactive bands. The intensity of each band was normalized to tubulin and then quantified relative to control. There was no significant difference between WT ($n = 4$) and NR3A TG mice ($n = 4$) mice in the levels of NR1, NR2A, or NR2B.