Frontiers in Pharmacology - Supplementary Information

Martire et al.

Supplemental Figures

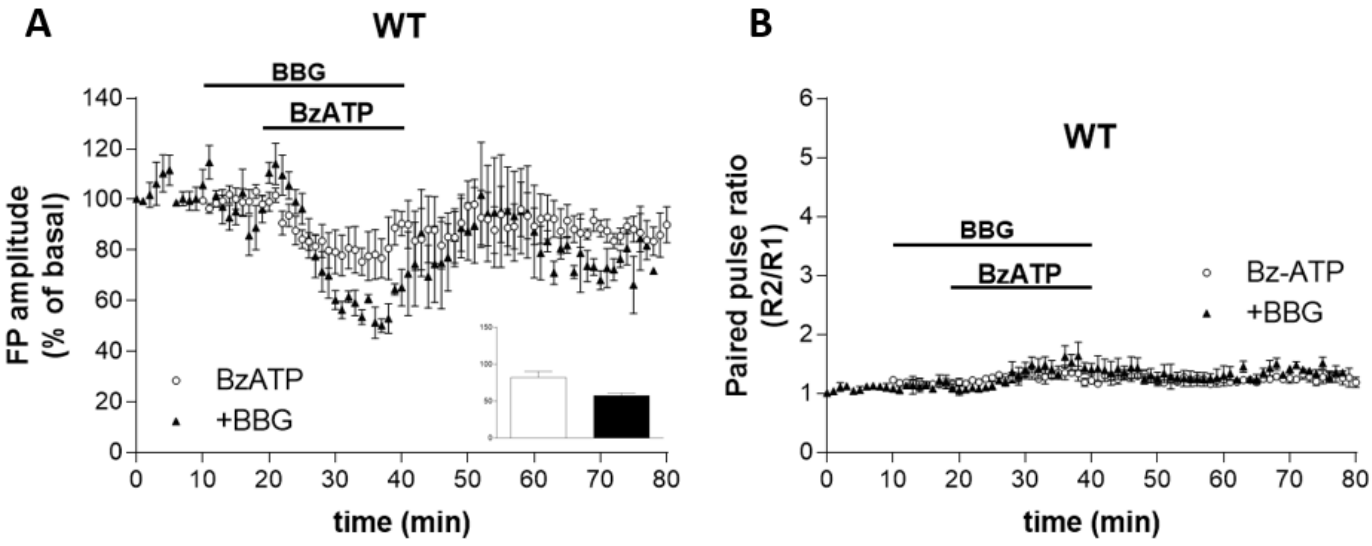

Figure S1.

BzATP-induced depression of corticostriatal synaptic transmission in WT mice is not reversed by the P2X7R antagonist Coomassie Brilliant Blue G (BBG)

In WT mice, the inhibitory effect of BzATP (50 μM for 20 min) on FP (82.08 ± 8.12% of basal, n= 4) was not prevented by the P2X7R antagonist BBG (1 μM, for 30 min) (57.42 ± 3.43%, of basal n = 3, panel A). On the contrary, a slight and non-significant worsening was induced. The trend of the mean PPR resulted superimposable with or without BBG (panel B), indicating a substancial absence of any effect. According to Jiang et al. (2000), BBG 1 μM is below the IC(50) values for inhibition of the other P2XRs, thus suggesting P2X7R selectivity. BBG (Sigma-Aldrich) was dissolved in distilled water.

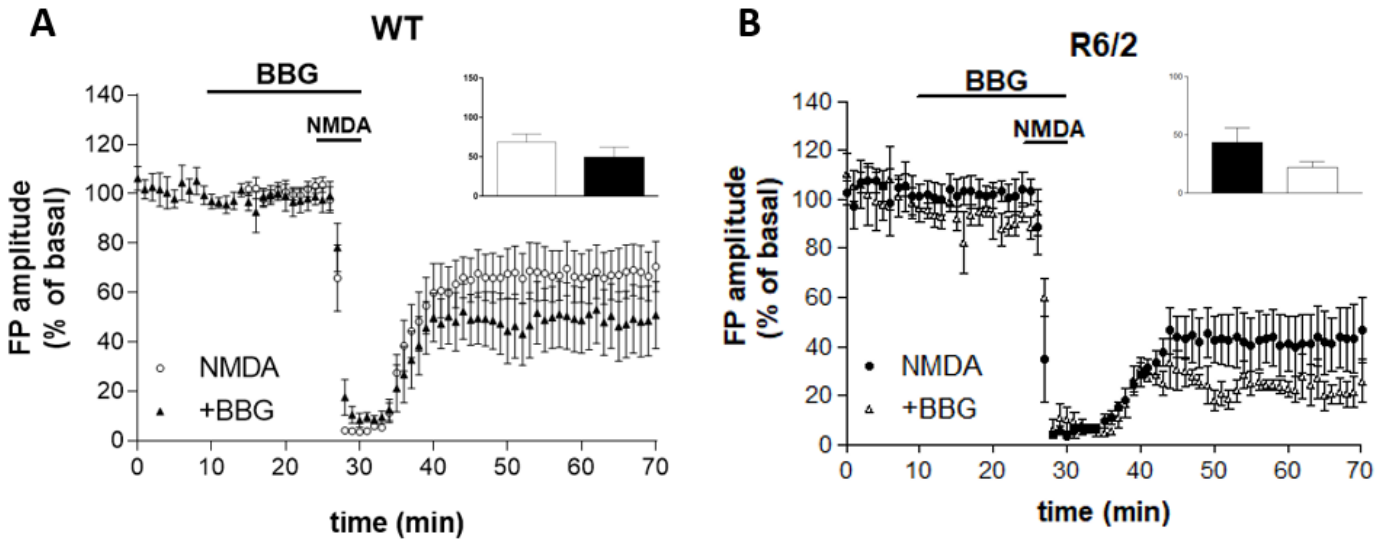

Figure S2.

P2X7R antagonist BBG did not reduce NMDA toxicity in corticostriatal slices from R6/2 and WT mice

The NMDA experimental paradigm has been already used by our group to assess the role of A_{2A} (Martire et al., 2007) and A_1 (Ferrante et al., 2014) receptors in excitotoxicity in corticostriatal slices from WT and R6/2 mice. NMDA (75 µM) is applied to the slices over 5 min, inducing a reduction of FP amplitude which results increased in R6/2 mice. In WT mice (panel A) the recovery of the FP after NMDA application (68.31 ± 10.44% of basal after 40 min of washout, n = 7) was not significantly affected by the BBG treatment (1 µM, for 20 min) (48.32 ± 13.80% of basal after 40 min of washout, n = 7). In R6/2 mice (panel B) NMDA toxicity was higher (43.20 ± 12.68% of basal after 40 min of washout, n = 3) than in WT mice, but also in this case BBG did not exert a protective action; on the contrary, a worsening, even if non-significant, was induced (21.69 ± 5.36% of basal after 40 min of washout, n = 4). NMDA (Sigma-Aldrich) was dissolved in NaOH 0.1 N.

References

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Jiang, L.H., Mackenzie, A.B., North, R.A., Surprenant, A. (2000). Brilliant blue G selectively blocks ATP-gated rat P2X(7) receptors. *Mol. Pharmacol.* 58, 82-88. PMID: 10860929.

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