

Article

Stimulation of Neurite Outgrowth in Cerebrocortical Neurons by Sodium Channel Activator Brevetoxin-2 Requires Both N-Methyl-D-aspartate Receptor 2B (GluN2B) and p21 Protein (Cdc42/Rac)-Activated Kinase 1 (PAK1)

Suneet Mehrotra ^{1,2}, Marsha L. Pierce ^{1,3}, Shashank M. Dravid ¹ and Thomas F. Murray ^{1,*}

¹ Department of Pharmacology and Neuroscience, School of Medicine, Creighton University, Omaha, NE 68178, USA

² Omeros, Seattle, WA 98119, USA

³ Department of Pharmacology, College of Graduate Studies, Northwestern University, Downers Grove, IL 60515, USA

* Correspondence: tfmurray@creighton.edu; Tel.: +1-402-280-2319

Supplementary Figure S1

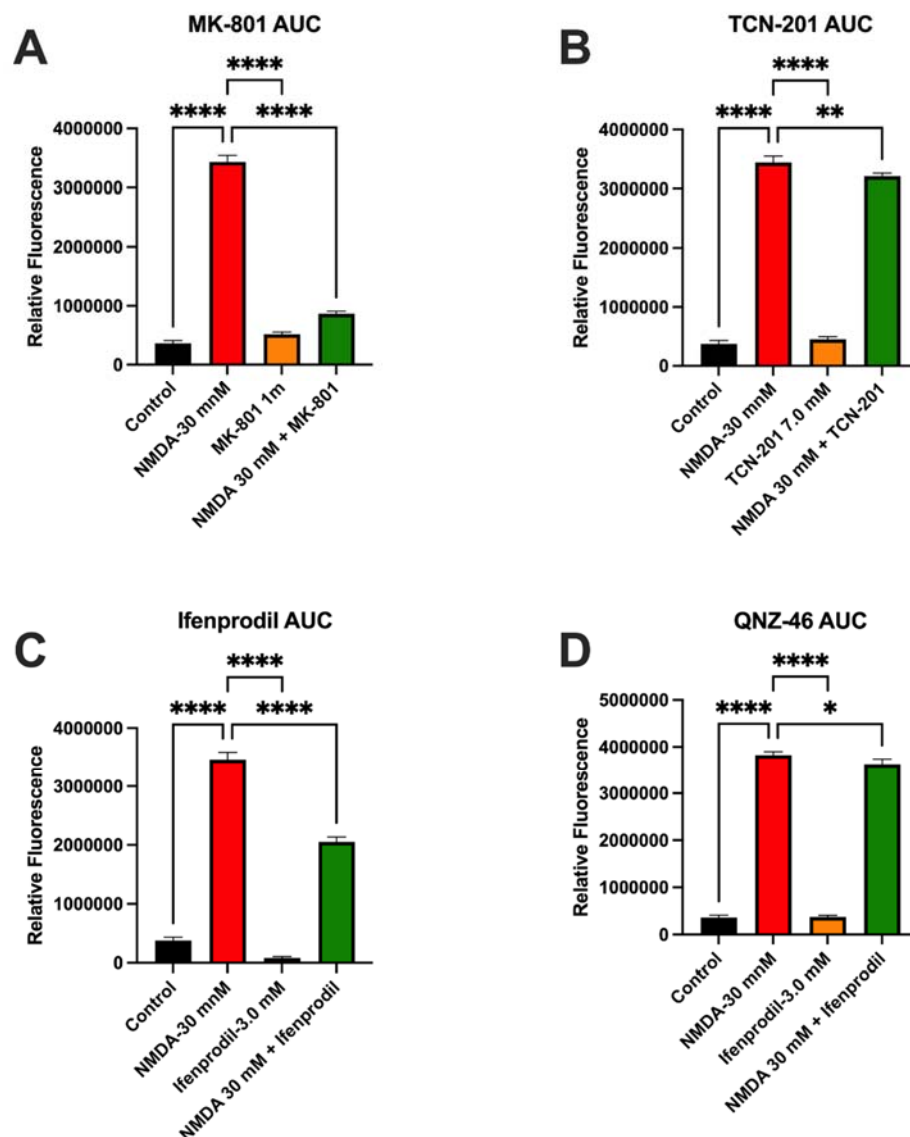


Figure S1. Area under the curve (AUC) was assessed and a one-way ANOVA with multiple comparisons were performed to determine statistical significance for the effects of pretreatment with NMDA-channel blocker MK-801 (**A**), noncompetitive GluN2A antagonist TCN-201 (**B**), noncompetitive GluN2B antagonist ifenprodil (**C**), and GluN2C and 2D antagonist QNZ-46 (**D**) on NMDA-induced Ca^{2+} influx (Figure 1A-D). Data shown represent the mean \pm SEM of 3 experiments.

Supplementary Figure S2

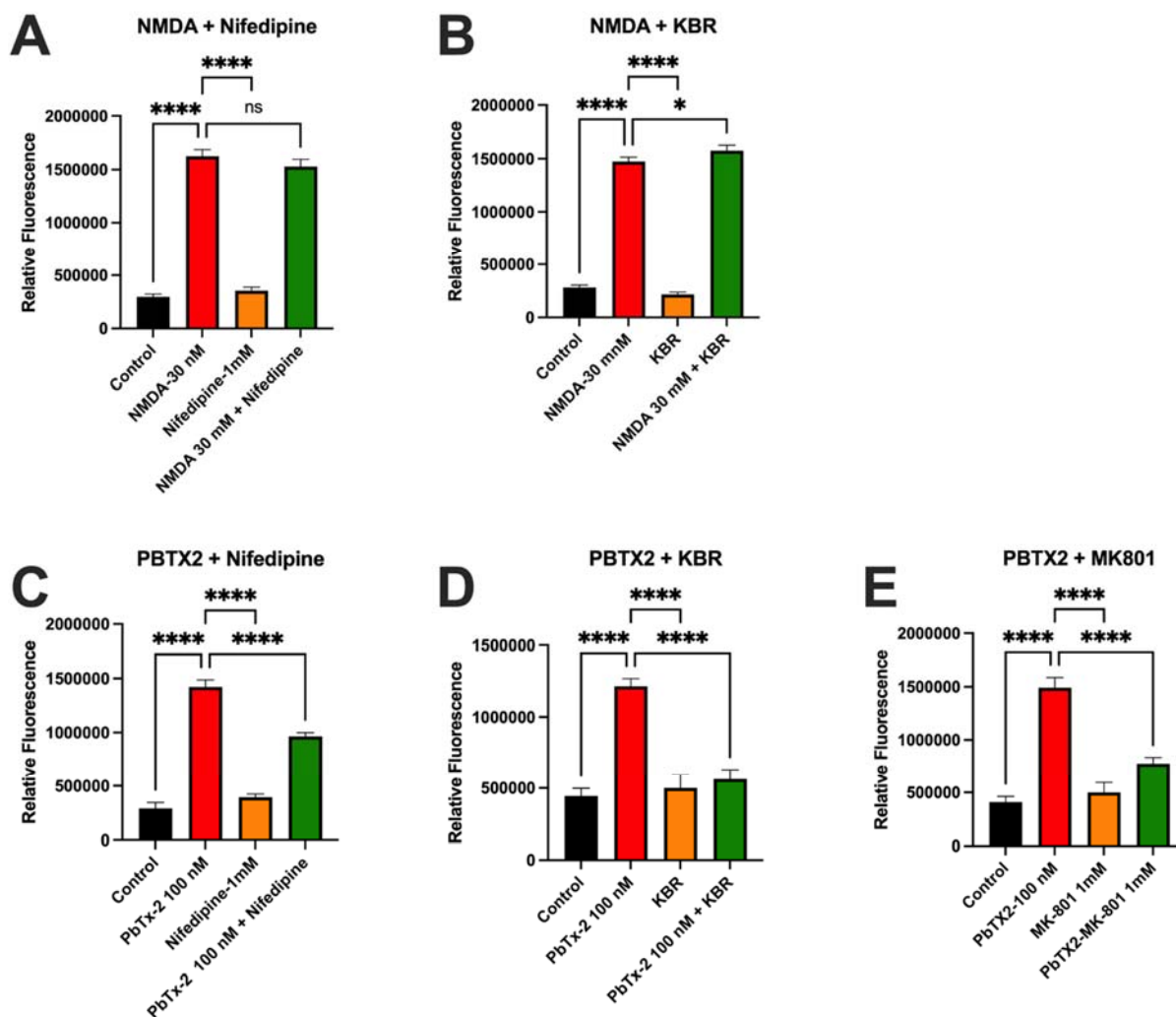


Figure S2. AUC was assessed and a one-way ANOVA with multiple comparisons were performed to determine statistical significance for the effects of pretreatment with nifedipine (A), reverse sodium-calcium exchanger KB-R7943 (B) on NMDA-induced Ca^{2+} influx and nifedipine (C), KB-R7943 (D) and MK-801 (E) on PbTx-2-induced Ca^{2+} influx (Figure 2A–E). Data shown represent the mean \pm SEM of 3 experiments.

Supplementary Figure S3.

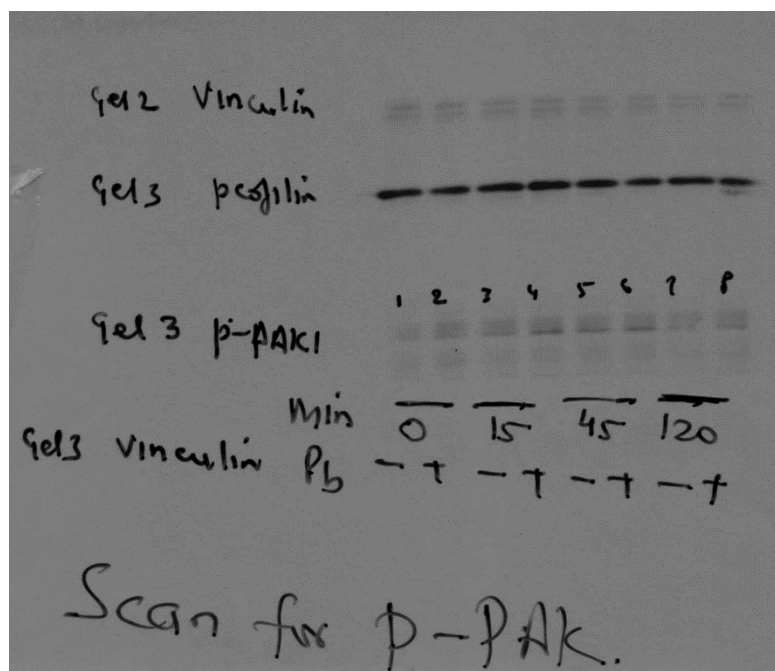


Figure S3. Raw data for p-PAK Western Blot.

Supplementary Figure S4

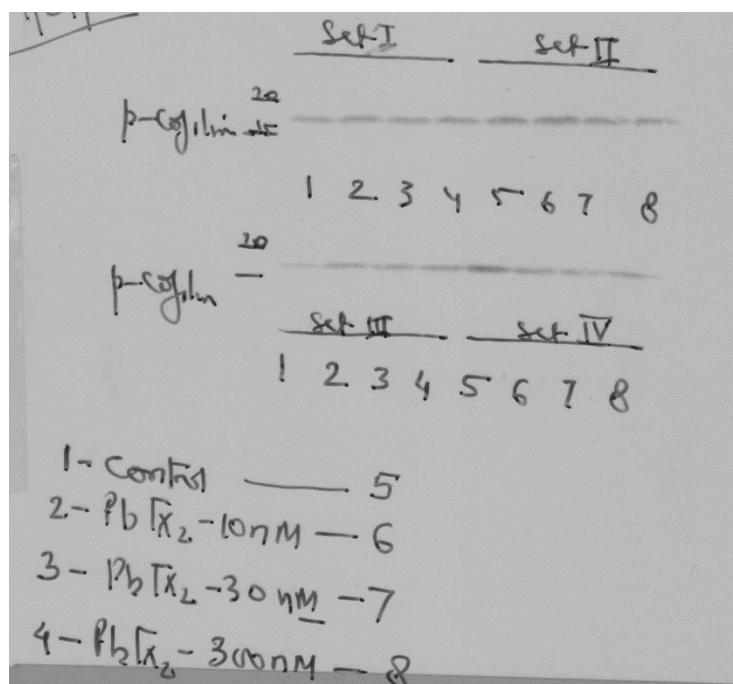


Figure S4. Raw data for p-cofilin Western Blot.