

# Supplemental Data

Article

## A novel NOX inhibitor alleviates Parkinson's disease pathology in PFF-injected mice.

Kwadwo Ofori<sup>1</sup>, Anurupa Ghosh<sup>1</sup>, Dinesh Kumar Verma<sup>1</sup>, Darice Wheeler<sup>1</sup>, Gabriela Cabrera<sup>1</sup>, Jong-Bok Seo<sup>2</sup> and Yong-Hwan Kim<sup>1\*</sup>.

Citation: To be added  
by editorial staff during  
production

Academic Editor:

Firstname Lastname

Received: date

Revised: date

Accepted: date

Published: date



Copyright: © 2023 by  
the authors. Submitted  
for possible open  
access publication  
under the terms and  
conditions of the  
Creative Commons  
Attribution (CC BY)  
license

(<https://creativecommons.org/licenses/by/4.0/>).

Publisher's Note: MDPI  
stays neutral with regard to  
jurisdictional claims in  
published maps and institutional affiliations.

<sup>1</sup>Department of Biological Sciences/Neuroscience program,  
Delaware State University, Dover, DE 19901, USA.

<sup>2</sup>Seoul Center, Korea Basic Science Institute, Seongbuk-gu, Seoul  
02841, Korea.

\* Correspondence: [yhkim@desu.edu](mailto:yhkim@desu.edu)(YHK)\*

Table S1.

Group	Conc. (uM)	pH	P <sub>e</sub> (10 <sup>-6</sup> cm/sec)
Progesterone	50	7.4	35.00±0.34
Ranitidine	50	7.4	0
Compound-11	12.5	7.4	6.01 ± 0.22

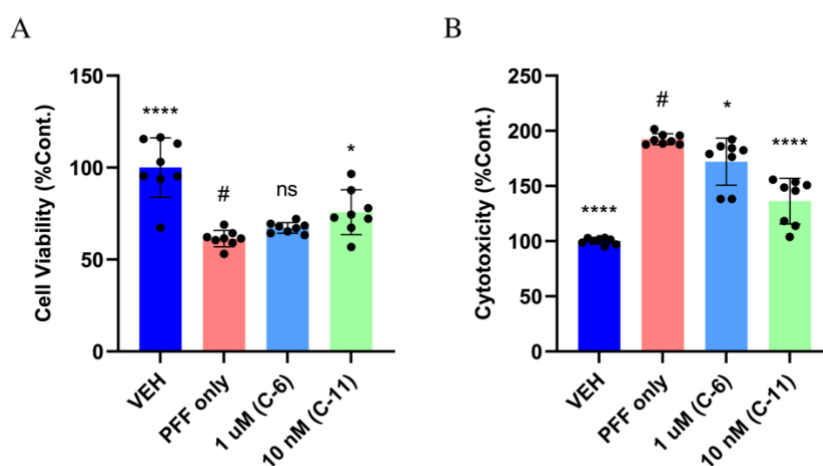
  

P <sub>e</sub> (10 <sup>-6</sup> cm/sec)	BBB	P <sub>e</sub> (10 <sup>-6</sup> cm/sec)	CNS
< 0.4	Low		
> 0.4	High	>10 < 10	CNS+ CNS-

We used Parallel artificial membrane permeability (PAMPA) assay as a high-throughput screening technique to predict the permeability of compound 11 relative to progesterone and ranitidine across a biological membrane.

Figure S1.

We performed a cell viability and cytotoxicity comparative assessment of compound-11 and compound-6 to confirm the superior efficacy of compound-11 relative to compound-6 at the optimal concentrations. We found that compound-11 was effective in recovering cell viability at lower concentrations compared compound-6 which was toxic at lower concentrations.



The compound-11 and 6 treatment decreases cytotoxicity and increases cell viability in PFF exposed N27P dopaminergic cells at their optimal concentration. One-way ANOVA, Dunnett's test was applied to compare with PFF only treated cells (#) (n=3/group in quadruple). \*:  $p < 0.05$ , \*\*:  $p < 0.001$  and \*\*\*\*:  $p < 0.0001$ . ns: not significant.