

## **Data Sheet**

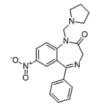
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Product Name : Neurounina-1
Cat. No. : PC-73273
CAS No. : 1380337-07-4
Molecular Formula : C<sub>20</sub>H<sub>20</sub>N<sub>4</sub>O<sub>3</sub>
Molecular Weight : 364.405

Target : Sodium-calcium Exchanger (NCX)

**Solubility** : 10 mM in DMSO



## **Biological Activity**

Neurounina-1 is a small molecule **Na+/Ca2+ exchanger** (NCX) activator, stimulates **NCX1** and **NCX2** activities with EC50 of 1.1-2.7 nM, does not affect NCX3 activity.

Neurounina-1 (10 nM) reduced cell death of primary cortical neurons exposed to oxygen-glucose deprivation followed by reoxygenation, also reduced  $\gamma$ -aminobutyric acid (GABA) release, enhanced GABA(A) currents, and inhibited both glutamate release and N-methyl-d-aspartate receptors in vitro.

Neurounina-1 effectively protects against stroke damage in vivo.

## References

Molinaro P, et al. *Mol Pharmacol.* 2013 Jan;83(1):142-56.

Severino B, et al. Front Pharmacol. 2019 Apr 25;10:432.

Magli E, et al. *J Med Chem*. 2021 Dec 23;64(24):17901-17919.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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