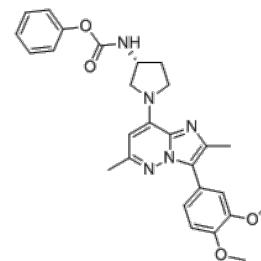


**Product Name** : PDDC  
**Cat. No.** : PC-72748  
**CAS No.** : 2232878-43-0  
**Molecular Formula** : C<sub>27</sub>H<sub>29</sub>N<sub>5</sub>O<sub>4</sub>  
**Molecular Weight** : 487.56  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## Biological Activity

PDDC is the first potent, selective, orally-available, and brain-penetrable **nSMase2** (neutral sphingomyelinase 2) inhibitor with pIC<sub>50</sub> of 6.57.

PDDC inhibited release of ADEVs in tissue culture and in vivo, capable of dose-dependently reducing EVs release in vitro and in vivo.

PDDC reduced these IL-1 $\beta$ -induced changes implicating nSMase2 inhibition as a therapeutic target for acute brain injury.

## References

Rojas C, et al. *Br J Pharmacol*. 2019 Oct;176(19):3857-3870.

Šála M, et al. *J Med Chem*. 2020 Jun 11;63(11):6028-6056.

Tallon C, et al. *Biochem Pharmacol*. 2021 Dec;194:114796.

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

E-mail: tech@probechem.com