Data Sheet (Cat.No.T84683)

NPBA

Chemical Properties

CAS No. :	524033-40-7
Formula:	C16H14F3N3O3
Molecular Weight:	353.30
Storage:	Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	NPBA is a bifunctional small molecule that acts as both an agonist of the potassium ion-gated double-porin channel TASK-3 (KCNK9) and an antagonist of the tandem-porin weak inwardly rectifying potassium channel TWIK2. NPBA significantly inhibits the activation of the NLRP3 inflammasome in macrophages.
Targets(IC50)	Others,Potassium Channel

Solubility Information

Solubility	DMSO: 80 mg/mL (226.44 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8305 mL	14.1523 mL	28.3046 mL
5 mM	0.5661 mL	2.8305 mL	5.6609 mL
10 mM	0.283 mL	1.4152 mL	2.8305 mL
50 mM	0.0566 mL	0.283 mL	0.5661 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fuyun Tian, et al. A Small-Molecule Compound Selectively Activates K2P Channel TASK-3 by Acting at Two Distant Clusters of Residues. Mol Pharmacol. 2019 Jul;96(1):26-35.

Yuanxing Zhi, et al. A novel TWIK2 channel inhibitor binds at the bottom of the selectivity filter and protects against LPS-induced experimental endotoxemia in vivo. Biochem Pharmacol. 2023 Dec:218:115894.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481