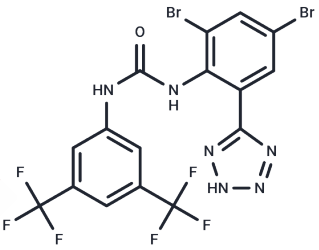
Data Sheet (Cat.No.T16348)

TargetMol

NS5806

Chemical Properties



CAS No. : 426834-69-7

Formula: C16H8Br2F6N6O

Molecular Weight: 574.07

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	NS5806 is an effective potassium current activator. NS5806 slows KV4.3 and KV4.2 current decay in channel complexes containing KChIP2. NS5806 enhances KV4.3/KChIP2 peak current amplitudes (EC50: 5.3 μM).
Targets(IC50)	Potassium Channel
In vitro	NS5806 activates canine transient outward potassium current (Ito) (IC50: 40.7 nM and an EC50 of 1.6 nM for inhibition and stimulation on the rabbit, respectively). NS5806 (10-100 nM) has concentration-dependent effects on ventricular and atrial Ito. NS5806 (10 μM) induces a 65% increase of KV4.3/KChIP2/DPP6 peak current amplitudes concentration-dependently and the time course of inactivation (τ) is slowed with an EC50 value of 25.4 μM in CHO-K1 cells[1][2].

Solubility Information

Solubility	DMSO: 250 mg/mL (435.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (5.75 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7419 mL	8.7097 mL	17.4195 mL
5 mM	0.3484 mL	1.7419 mL	3.4839 mL
10 mM	0.1742 mL	0.871 mL	1.7419 mL
50 mM	0.0348 mL	0.1742 mL	0.3484 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

Lundby A, et al. Effect of the I(to) activator NS5806 on cloned K
Cheng H, et al. Differential responses of rabbit ventricular and atrial transient outward current (Ito) to the Itomodulator NS5806. Physiol Rep. 2017 Mar;5(5). pii: e13172.