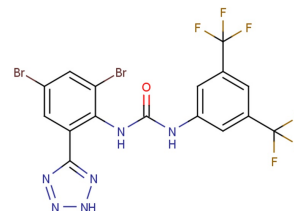


NS5806

## Chemical Properties

CAS No.: 426834-69-7  
Formula: C<sub>16</sub>H<sub>8</sub>Br<sub>2</sub>F<sub>6</sub>N<sub>6</sub>O  
Molecular Weight: 574.07  
Appearance: N/A  
Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



## 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 (EC <sub>50</sub> : 5.3 $\mu$ M).
Targets(IC <sub>50</sub> )	KV4.3: 5.3 nM
In vitro	NS5806 activates canine transient outward potassium current (I <sub>to</sub> ) (IC <sub>50</sub> : 40.7 nM and an EC <sub>50</sub> of 1.6 nM for inhibition and stimulation on the rabbit, respectively). NS5806 (10-100 nM) has concentration-dependent effects on ventricular and atrial I <sub>to</sub> . NS5806 (10 $\mu$ M) induces a 65% increase of KV4.3/KChIP2/DPP6 peak current amplitudes concentration-dependently and the time course of inactivation ( $\tau$ ) is slowed with an EC <sub>50</sub> value of 25.4 $\mu$ M in CHO-K1 cells[1][2].

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.742 mL	8.71 mL	17.419 mL
5 mM	0.348 mL	1.742 mL	3.484 mL
10 mM	0.174 mL	0.871 mL	1.742 mL
50 mM	0.035 mL	0.174 mL	0.348 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

### Reference

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

Inhibitors · Natural Compounds · Compound Libraries

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