

BN-82451 2HCl

Chemical Properties

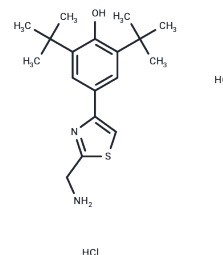
CAS No. : 663172-95-0

Formula: C₁₈H₂₈Cl₂N₂O₂S

Molecular Weight: 391.4

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	BN-82451 2HCl is a dual inhibitor of COX-1 and COX-2 and can be used to study Huntington's chorea and Parkinson's disease.
Targets(IC50)	Others,COX,Sodium Channel
In vivo	1 - 10 mg/kg oral doses of BN82451 reduced the severity of fully established AIMs in a dose-related manner in a rat model of PD. This antimotor dysfunction effect was achieved with subchronic administration of lower doses of BN82451 compared with acute single treatments.The improvement in AIMs was not due to a reduction in general locomotor activity in the dyskinetic rats.BN82451 treatment significantly reversed the overexpression of c-Fos, FosB, and Arc mRNAs, which have been associated with the dyskinetic effects of levodopa.The effect of BN82451 was not due to a reduction in general motor activity in the dyskinetic rats. [1];After subchronic administration of 5 mg/kg/day subcutaneously for 5 days, IRC concentrations in the brain of male cynomolgus monkeys (Macaca fascicularis) were higher (cortex: 20.87±6.92 μM) than in plasma (1.16±0.33 μM), with a ratio of 18.2±2.5; at 2.5, 5, and 10 mg/kg IRC-082451, IRC concentrations in the brain of male cynomolgus monkeys were higher than in plasma (1.16±0.33 μM), with a ratio of 18.2±2.5. Subcutaneous injection into Macaca fascicularis quantified L-DOPA-induced dyskinesia and showed no significant effect on spontaneous motor activity in all acute treatments tested. [3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5549 mL	12.7747 mL	25.5493 mL
5 mM	0.511 mL	2.5549 mL	5.1099 mL
10 mM	0.2555 mL	1.2775 mL	2.5549 mL
50 mM	0.0511 mL	0.2555 mL	0.511 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

- Spinnewyn B, et al. Chabrier PE. BN82451 attenuates L-dopa-induced dyskinesia in 6-OHDA-lesioned rat model of Parkinson's disease. *Neuropharmacology*. 2011 Mar;60(4):692-700.
- Chabrier PE, et al. Pharmacological properties of BN82451: a novel multitargeting neuroprotective agent. *CNS Drug Rev*. 2007 Fall;13(3):317-3Review.
- Klivenyi P, et al. Increased survival and neuroprotective effects of BN82451 in a transgenic mouse model of Huntington's disease. *J Neurochem*. 2003 Jul;86(1):267-72. Erratum in: *J Neurochem*. 2003 Oct;87(1):272.
- Aron Badin R, et al. IRC-082451, a novel multitargeting molecule, reduces L-DOPA-induced dyskinesias in MPTP Parkinsonian primates. *PLoS One*. 2013;8(1):e52680.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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