

BN201

Chemical Properties

CAS No. : 1361200-34-1

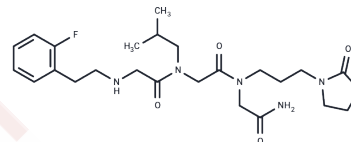
Formula: C₂₅H₃₈N₅O₄

Molecular Weight: 491.6

Store at low temperature

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	BN201 (OCS-05) is a drug with neuroprotective and myelin repair effects, which acts mainly by activating serum glucocorticoid kinase-2 (SGK2), which in turn activates the FOXO3 pathway to promote neuronal survival and myelin repair. It is mainly used for the treatment of inflammatory neurological diseases such as multiple sclerosis (MS) and experimental autoimmune encephalomyelitis (EAE).BN201 is able to regulate multiple kinases in the insulin growth factor 1 (IGF1) pathway and cross the blood-brain barrier.
Targets(IC50)	Others,FOXO,IGF-1R,SGK
In vitro	Methods: RN22 cells were treated with BN201 (1-10-50 ng/ml or 1-10 µg/ml, 24 hours). Human SH-SY5Y neuroblastoma cells treated with BN201 (0.03, 0.1, 0.5, 1, 3, 5, 10, 20 and 100 µM) were treated with retinoic acid (10 µM, 6 days) and MPP+ (100 µM) or H2O2 (100 µM) were added 30 minutes later. Cell viability was measured by MTT assay. Results: BN201 had the strongest activity in protecting SH-SY5Y and RN22 cells from oxidative stress. [1]
In vivo	Methods: Female C57BL/6 mice immunized with MOG35-55 were treated with BN201 (12.5, 25, 50, 100 mg/kg, intraperitoneally, for 30 days) to evaluate its effect in protecting neurons and myelin-producing cells in vivo. Results: BN201-treated mice had less axonal and neuronal loss in the spinal cord and optic nerves. [1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0342 mL	10.1709 mL	20.3417 mL
5 mM	0.4068 mL	2.0342 mL	4.0683 mL
10 mM	0.2034 mL	1.0171 mL	2.0342 mL
50 mM	0.0407 mL	0.2034 mL	0.4068 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

Villoslada P, et al. Axonal and Myelin Neuroprotection by the Peptoid BN201 in Brain Inflammation. *Neurotherapeutics*. 2019 Jul;16(3):808-827.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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