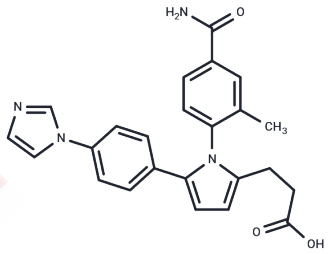
Data Sheet (Cat.No.T6901)

TargetMol

N6022

Chemical Properties



CAS No. : 1208315-24-5

Formula: C24H22N4O3

Molecular Weight: 414.46

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	N6022(IC50 of 8 nM) is an effective, reversible, and selective S-Nitrosoglutathione reductase(GSNOR) inhibitor.
Targets(IC50)	GSNOR
In vitro	N6022 binds to rat plasma proteins in a concentration-dependent manner. At lower drug concentrations (20 μM), N6022 show more effect on ATP than on GSH. N6022 (IC50 of 8 nM and a Ki of 2.5 nM) binds in the GSNO substrate binding pocket like a competitive inhibitor. N6022 is uncompetitive with cofactors NAD+ and NADH.
In vivo	N6022 treats rats in 50 mg/kg leading to a slight increase in the incidence of granulomas. In serum, N6022 remained in solution is up to 5 mg/mL.
Cell Research	N6022 is dissolved in 5% DMSO. N6022 is tested using a rat hepatoma (H4IIE) cell line whereby cells are seeded into 96-well plates and cultured in medium containing 20% bovine serum. Following an equilibration period of 48 h, the cells are treated with N6022 (5% DMSO vehicle) at concentrations of 0, 1, 5, 10, 20, 50, 100, and 300 μM for 24 h at 37° C in 5% CO2. Camptothecin and rotenone are included as positive controls. The cell supernatant or the cells themselves are harvested for biochemical analysis.

Solubility Information

Solubility	DMSO: 122.5 mg/mL (295.57 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (24.13 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (24.13 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.4128 mL	12.0639 mL	24.1278 mL
5 mM	0.4826 mL	2.4128 mL	4.8256 mL
10 mM	0.2413 mL	1.2064 mL	2.4128 mL
50 mM	0.0483 mL	0.2413 mL	0.4826 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

Green LS, et al. Biochemistry. 2012, 51(10), 2157-2168
Liu Q, Gu T, Su L Y, et al. GSNOR facilitates antiviral innate immunity by restricting TBK1 cysteine S-nitrosation. Redox Biology. 2021: 102172.
Sun X, et al. ACS Med Chem Lett. 2011, 2(5), 402-406.