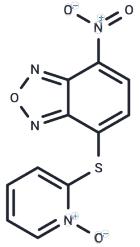
Data Sheet (Cat.No.T6908)

TargetMol

NSC 228155

Chemical Properties



CAS No. : 113104-25-9

Formula: C11H6N4O4S

Molecular Weight: 290.25

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	NSC 228155 is an activator of EGFR, binding to the sEGFR dimerization domain II and modulating EGFR tyrosine phosphorylation.
Targets(IC50)	EGFR,Epigenetic Reader Domain,Histone Acetyltransferase,DNA/RNA Synthesis
In vitro	NSC 228155 promotes transactivation of several RTKs, including ErbB2 and ErbB3, Insulin R and IGF-1 R receptors in the cells. It stimulates dimerization of sEGFR domain II[1]. NSC 228155 can rapidly move across cell membranes and disperse within both cytoplasmic and nuclear compartments. It rapidly generates hydrogen peroxide within cells[2]. NSC 228155 is also a potent inhibitor of KIX-KID interaction(IC50 = 0.36 μM), but it is not particularly selective against CREB-mediated gene transcription in HEK 293T cells[3].
Cell Research	MDA MB468 cells serum-starved overnight are pre-incubated (or not) with 10?μM AG1478 or 2?μM PD 153035 for 90?min and then, where indicated, incubated with 100?μM NSC 228155 or CN 009543V or 150?ng/ml EGF or vehicle (0.2% DMSO) for 15?min. Proteins are blotted to nitrocellulose membrane and analyzed with biotinylated anti-pTyr P100, anti-pEGFR Y1068 and anti-EGFR (epitope in cytoplasmic region) antibodies. (Only for Reference)

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 7.34 mg/mL (25.29 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: 0.73 mg/mL (2.52 mM),Solution. 10% DMSO+90% Corn Oil: 1 mg/mL (3.45 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	3.4453 mL	17.2265 mL	34.4531 mL
5 mM	0.6891 mL	3.4453 mL	6.8906 mL
10 mM	0.3445 mL	1.7227 mL	3.4453 mL
50 mM	0.0689 mL	0.3445 mL	0.6891 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

Sakanyan V, et al. Sci Rep. 2014, 4:3977.
He X Y, Yang Y S, Zheng Y X, et al.Scutellarin combined with lidocaine exerts antineoplastic effect in human glioma associated with repression of epidermal growth factor receptor signaling.PloS one.2025, 20(1): e0318031.
Sakanyan V, et al. Sci Rep. 2016, 6:21088.
Xie F, et al. Bioorg Med Chem Lett. 2013, 23(19):5371-5.