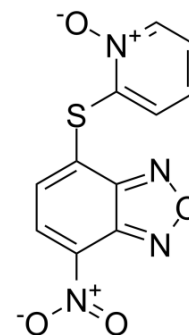


NSC 228155

Cat. No.:	HY-101084		
CAS No.:	113104-25-9		
Molecular Formula:	C ₁₁ H ₆ N ₄ O ₄ S		
Molecular Weight:	290.25		
Target:	EGFR; Histone Acetyltransferase; Epigenetic Reader Domain		
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Epigenetics		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



Solvent & Solubility

In Vitro	DMSO : 16 mg/mL (55.12 mM; Need ultrasonic)						
	H ₂ O : < 0.1 mg/mL (insoluble)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				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	
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.6 mg/mL (5.51 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	NSC 228155 is an activator of EGFR, binds to the extracellular region of EGFR and enhance tyrosine phosphorylation of EGFR ^[1] . NSC 228155 is also a potent inhibitor of KIX-KID interaction, inhibits kinase-inducible domain (KID) from CREB and KID-interacting domain (KIX) from CBP, with an IC ₅₀ of 0.36 μM ^[2] .				
IC ₅₀ & Target	EGFR	KIX-KID 0.36 μM (IC ₅₀)			
In Vitro	NSC 228155 (100 μM) enhances EGFR tyrosine phosphorylation via action of SOD1 ^[1] . NSC 228155 (Compound 1) inhibits CREB- and VP16-CREB-mediated gene transcription in living HEK 293T cells with IC ₅₀ s of 2.09 and 6.14 μM, respectively ^[2] .				

NSC 228155 is not selective against CREB-mediated gene transcription in living HEK 293T cells^[2].

REFERENCES

- [1]. Sakanyan V, et al. Activation of EGFR by small compounds through coupling the generation of hydrogen peroxide to stable dimerization of Cu/Zn SOD1. Sci Rep. 2016 Feb 17;6:21088.
- [2]. Xie F, et al. Identification, synthesis and evaluation of substituted benzofurazans as inhibitors of CREB-mediated gene transcription. Bioorg Med Chem Lett. 2013 Oct 1;23(19):5371-5.
-

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA