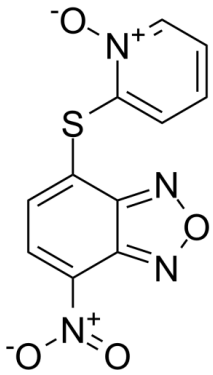
Data Sheet

Product Name:	NSC 228155
Cat. No.:	CS-0020796
CAS No.:	113104-25-9
Molecular Formula:	$C_{11}H_6N_4O_4S$
Molecular Weight:	290.25
Target:	EGFR; Epigenetic Reader Domain; Histone Acetyltransferase
Pathway:	Epigenetics; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK
Solubility:	DMSO : 16 mg/mL (55.12 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

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]. IC50 & Target: IC50: 0.36 μM (KIX-KID)[1] **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.

CAIndexNames:

2,1,3-Benzoxadiazole, 4-nitro-7-[(1-oxido-2-pyridinyl)thio]-

SMILES:

[O-][N+]1=CC=CC=C1SC2=CC=C([N+]([O-])=O)C3=NON=C32

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