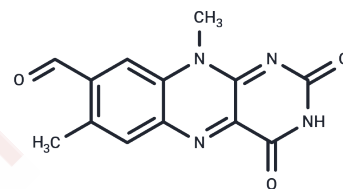


Ro 08-2750

Chemical Properties

CAS No. : 37854-59-4
 Formula: C₁₃H₁₀N₄O₃
 Molecular Weight: 270.24
 Appearance: no data available
 Storage: store at low temperature
 Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Ro 08-2750 is a non-peptide, reversible nerve growth factor (NGF) inhibitor that binds to NGF with an IC ₅₀ of approximately 1 μM. It is also a selective MSI RNA-binding activity inhibitor, exhibiting an IC ₅₀ of 2.7 μM. Additionally, Ro 08-2750 selectively inhibits NGF binding to p75NTR over TRKA.
Targets(IC ₅₀)	Others
In vitro	Ro 08-2750 inhibits the survival of human AML lines and patient cells. Ro 08-2750 suppresses MSI2 RNA-binding and alters the MSI2 gene signature. Ro 08-2750 binds to the NGF dimer thereby probably inducing a change in its conformation such that NGF cannot bind to p75NTR anymore. Ro 08-2750 (5-10 μM; 8hours) increases differentiation and apoptosis in myeloid leukemia cells. Ro 08-2750 (10 nM) fully rescues cells from undergoing NGF-induced SK-N-MC 103 cell death [2][3].
In vivo	In a myeloid leukemia model in vivo, Ro 08-2750 (13.75mg/kg; i.p.) suppresses leukemogenesis [3].

Solubility Information

Solubility	DMSO: 3.5 mg/mL (12.95 mM), Sonication and heating to 80°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7004 mL	18.5021 mL	37.0041 mL
5 mM	0.7401 mL	3.7004 mL	7.4008 mL
10 mM	0.370 mL	1.8502 mL	3.7004 mL
50 mM	0.074 mL	0.370 mL	0.7401 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.

Reference

- Arkin MR, et al. Small-molecule inhibitors of protein-protein interactions: progressing towards the dream. Nat Rev Drug Discov. 2004 Apr;3(4):301-17.
- Niederhauser O, et al. NGF ligand alters NGF signaling via p75(NTR) and trkA. J Neurosci Res. 2000 Aug 1;61(3):263-72.
- Minuesa G, et al. Small-molecule targeting of MUSASHI RNA-binding activity in acute myeloid leukemia. Nat Commun. 2019 Jun 19;10(1):2691.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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