

Product Name: Ro 08-2750

Catalog No.: 2272

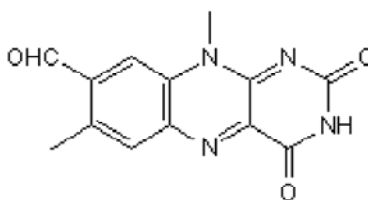
Batch No.: 3

CAS Number: 37854-59-4

IUPAC Name: 2,3,4,10-Tetrahydro-7,10-dimethyl-2,4-dioxobenzo[g]pteridine-8-carboxaldehyde

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₀N₄O₃·½H₂O
Batch Molecular Weight: 279.25
Physical Appearance: Orange solid
Solubility: DMSO to 10 mM with gentle warming
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 95.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	55.91	3.97	20.06
Found	56.32	3.59	20.32

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Non-peptide inhibitor of NGF that binds the NGF dimer ($K_D \sim 1 \mu\text{M}$) possibly causing a conformational change. Selectively inhibits binding of NGF to p75^{NTR} at submicromolar concentrations, and to both p75^{NTR} and TrkA at concentrations $> 5 \mu\text{M}$. Prevents NGF-induced apoptosis in SK-N-MC cells. Suppresses cancer cell proliferation via regulation of Hippo signaling and YAP phosphorylation.

Physical and Chemical Properties:

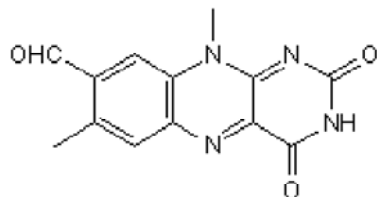
Batch Molecular Formula: $\text{C}_{13}\text{H}_{10}\text{N}_4\text{O}_3 \cdot \frac{1}{2}\text{H}_2\text{O}$

Batch Molecular Weight: 279.25

Physical Appearance: Orange solid

Minimum Purity: $\geq 95\%$

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 10 mM with gentle warming

When purchased as a 1mg unit, this product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a $45\text{-}60^\circ\text{C}$ water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Yang *et al* (2018) NTRK1 is a positive regulator of YAP oncogenic function. *Oncogene* **38** 2778. PMID: 30542115.

Arkin and Wells (2004) Small-molecule inhibitors of protein-protein interactions: progressing towards the dream. *Nat.Rev.Drug Discov.* **3** 301. PMID: 15060526.

Niederhauser *et al* (2000) NGF ligand alters NGF signaling via p75^{NTR} and TrkA. *J.Neurosci.Res.* **61** 263. PMID: 10900073.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956