

Product Name: IRAK1/4 Inhibitor I

Catalog No.: 5665

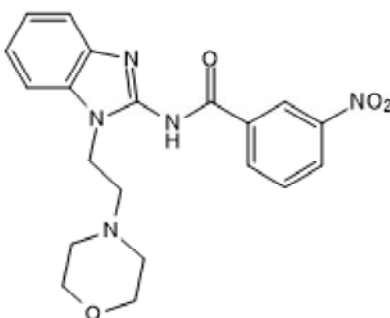
Batch No.: 1

CAS Number: 509093-47-4

IUPAC Name: *N*-[1-[2-(4-Morpholinyl)ethyl]-1*H*-benzimidazol-2-yl]-3-nitrobenzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀H₂₁N₅O₄
Batch Molecular Weight: 395.41
Physical Appearance: Yellow solid
Solubility: DMSO to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.67 (Dichloromethane:Methanol [95:5])
HPLC: Shows 98.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	60.75	5.35	17.71
Found	60.94	5.38	17.63

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

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Description:

IRAK1/4 Inhibitor I is an IRAK4 and IRAK1 inhibitor (IC₅₀ values are 0.2 and 0.3 μM, respectively).

Physical and Chemical Properties:

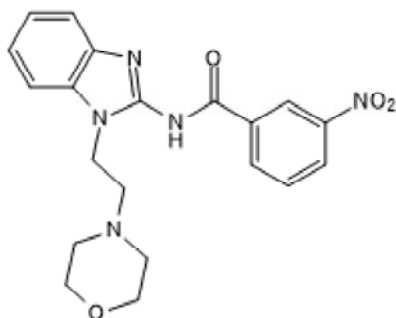
Batch Molecular Formula: C₂₀H₂₁N₅O₄

Batch Molecular Weight: 395.41

Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°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:

Powers et al (2006) Discovery and initial SAR of inhibitors of interleukin-1 receptor-associated kinase-4. *Bioorg.Med.Chem.Lett.* **16** 2842. PMID: 16563752.

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