

Product Name: TAK 715

Catalog No.: 4254

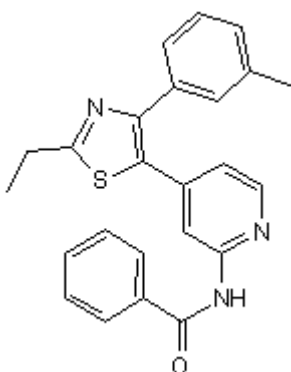
Batch No.: 1

CAS Number: 303162-79-0

IUPAC Name: *N*-[4-[2-Ethyl-4-(3-methylphenyl)-5-thiazolyl]-2-pyridinyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₁N₃OS
Batch Molecular Weight: 399.51
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.5 (Ethyl acetate:Petroleum ether [1:2])
HPLC: Shows 99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	72.15	5.3	10.52
Found	72.13	5.29	10.53

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

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Description:

Inhibitor of p38 MAPK (IC_{50} = 7.1 nM for p38 MAPK α). Also inhibits Wnt-3a-stimulated β -catenin signaling. Inhibits 22 kinases by more than 80%, including CK1 δ/ϵ . Anti-inflammatory and anti-rheumatoid arthritis agent. Orally bioavailable.

Physical and Chemical Properties:

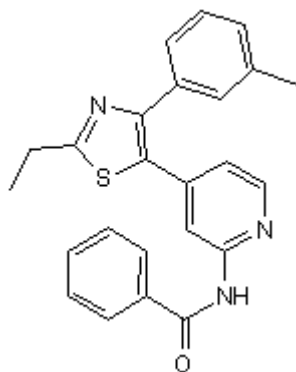
Batch Molecular Formula: C₂₄H₂₁N₃OS

Batch Molecular Weight: 399.51

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 50 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:

Miwatashi et al (2005) Novel inhibitor of p38 MAP kinase as an anti-TNF- α drug: discovery of *N*-[4-[2-ethyl-4-(3-methylphenyl)-1,3-thiazol-5-yl]-2-pyridyl]benzamide (TAK-715) as a potent and orally active anti-rheumatoid arthritis agent. *J.Med.Chem.* **48** 5966. PMID: 16162000.

Verkaar et al (2011) Inhibition of Wnt/ β -catenin signaling by p38 MAP kinase inhibitors is explained by cross-reactivity with casein kinase I δ/ϵ . *Chem.Biol.* **18** 485. PMID: 21513885.

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