

Certificate of Analysis

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Product Name: SKF 86002 dihydrochloride

Catalog No.: 2008

Batch No.: 3

CAS Number: 116339-68-5

IUPAC Name: 6-(4-Fluorophenyl)-2,3-dihydro-5-(4-pyridinyl)imidazo[2,1-b]thiazole dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{16}H_{12}FN_3S \cdot 2HCl \cdot \frac{3}{4}H_2O$

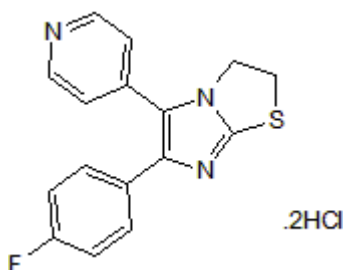
Batch Molecular Weight: 383.78

Physical Appearance: Yellow solid

Solubility: water to 50 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 258 - 260°C(dec)

HPLC: Shows >98.03% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 50.07 4.07 10.95

Found 50.08 3.87 10.92

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

Product Information

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Description:

Inhibitor of p38 MAP kinase (IC_{50} = 0.1 - 1 μ M). Potently inhibits LPS-induced IL-1 and TNF- α production in human monocytes (IC_{50} = 1 μ M). Also inhibits 5-lipoxygenase- and cyclooxygenase-mediated arachidonic acid metabolism in RBL-1 cells (IC_{50} values are 10 and 100 μ M respectively). Anti-inflammatory following oral administration in vivo.

Physical and Chemical Properties:

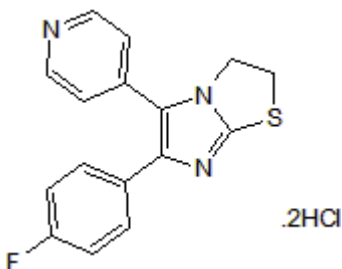
Batch Molecular Formula: $C_{16}H_{12}FN_3S \cdot 2HCl \cdot \frac{3}{4}H_2O$

Batch Molecular Weight: 383.78

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

water 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:

Griswold et al (1987) SK&F 86002: a structurally novel anti-inflammatory agent that inhibits lipoxygenase- and cyclooxygenase-mediated metabolism of arachidonic acid. *Biochem.Pharmacol.* **36** 3463. PMID: 2823821.

Lee et al (1994) A protein kinase involved in the regulation of inflammatory cytokine biosynthesis. *Nature* **372** 739. PMID: 7997261.

Nick et al (1997) Common and distinct intracellular signaling pathways in human neutrophils utilized by platelet activating factor and FMLP. *J.Clin.Invest.* **99** 975. PMID: 9062356.

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