

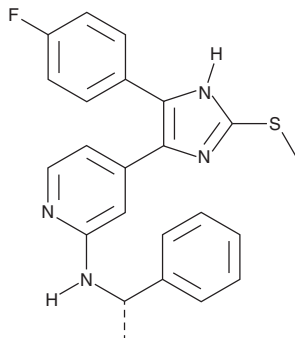
PRODUCT INFORMATION



(S)-p38 MAPK Inhibitor III

Item No. 19696

CAS Registry No.: 581098-48-8
Formal Name: 4-[5-(4-fluorophenyl)-2-(methylthio)-1H-imidazol-4-yl]-N-[(1S)-1-phenylethyl]-2-pyridinamine
Synonyms: (S)-p38 MAP Kinase Inhibitor III, (S)-p38 Mitogen-activated Protein Kinase Inhibitor III
MF: C₂₃H₂₁FN₄S
FW: 404.5
Purity: ≥98%
UV/Vis.: λ_{max}: 253, 304 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(S)-p38 MAPK inhibitor III is supplied as a crystalline solid. A stock solution may be made by dissolving the (S)-p38 MAPK inhibitor III in the solvent of choice, which should be purged with an inert gas. (S)-p38 MAPK inhibitor III is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (S)-p38 MAPK inhibitor III in these solvents is approximately 30, 12, and 20 mg/ml, respectively.

(S)-p38 MAPK inhibitor III is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (S)-p38 MAPK inhibitor III should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. (S)-p38 MAPK inhibitor III has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(S)-p38 MAPK inhibitor III is a methylsulfanylimidazole that inhibits p38 MAP kinase (IC₅₀ = 0.90 μM *in vitro*).¹ It is cell-permeable, potently blocking the release of TNF-α and IL-1β from human peripheral blood mononuclear cells (IC₅₀s = 0.37 and 0.044 μM, respectively).¹

Reference

1. Laufer, S.A., Wagner, G.K., Kotschenreuther, D.A., et al. Novel substituted pyridinyl imidazoles as potent anticytokine agents with low activity against hepatic cytochrome P450 enzymes. *J. Med. Chem.* **46**(15), 3230-3244 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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