



p38 MAPK Inhibitor III (ML3403)

(RS)-{4-[5-(4-Fluorophenyl)-2-methylsulfonyl-3H-imidazol-4-yl]pyridine-2-yl}-(1-phenylethyl)amine

PRODUCT ANALYSIS SHEET

Catalog Number:	PHZ1163
Lot Number:	See product label
Quantity:	1.0 mg
Appearance:	Yellow solid. Packaged under an inert gas.
Molecular Formula:	C ₂₃ H ₂₁ FN ₄ S
Molecular Weight:	404.5
Purity:	≥98%, as determined by HPLC
Summary:	ML3403 is a cell permeable, potent inhibitor of p38 MAPK. Kinetic studies indicate that this compound is competitive with respect to ATP. ML3403 suppresses cytokine release both <i>in vivo</i> (LPS-stimulated mice) and <i>in vitro</i> (LPS-stimulated isolated human PBMCs). ML3403 has less impact on cytochrome P450-2D6 than SB203580, and is therefore an attractive alternative for use in whole animal studies.
Biological Activity:	p38α MAPK: IC ₅₀ = 380 nM TNF-α release from LPS-stimulated mice: ED ₅₀ = 1.33 mg/kg TNF-α release from LPS-stimulated human PBMCs: IC ₅₀ = 160 nM IL-1β release from LPS-stimulated human PBMCs: IC ₅₀ = 39 nM
Solubility:	Soluble in DMSO at a concentration of 5 mg/mL.
Sterility:	This product is not sterile.
Storage:	Store, as supplied, at 2-8°C, protected from light. Upon solubilization, apportion into working aliquots and store at -20°C. Avoid repeated freeze/thaw cycles. Solutions are stable at -20°C for up to three months.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
Related Products:	p38 MAPK [pTpY180/182] antibody, Cat. # 44-684G JNK1&2 [pTpY183/185] antibody, Cat. # 44-682G ERK1&2 [pTpY185/187] antibody, Cat. # 44-680G MEK3 [pSpT189/193] antibody, Cat. # 44-470

This product is for research use only. Not for use in diagnostic procedures.

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Manufactured under ISO 13485 Quality Standard

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PI PHZ1163

(Rev 1.0) (DCC-08-1232)

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References:

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

Laufer, S.A., et al. (2004) Tetrasubstituted imidazole inhibitors of cytokine release: probing substituents in the N-1 position. J. Med. Chem. 47(25):6311-6325.

Caution:

Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.

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