

## Catalog # 10-2173 SB 203580

CAS# 152121-47-6

4-(4-Fluorophenyl)-2-(4-methylsulfinylphenyl)-5-(4-pyridyl)imidazole Lot # X101413

A potent and selective inhibitor of p38 MAP kinase,  $IC_{50}$ =50 and 500 nM for p38 and p38 $\beta$ 2 respectively. No other kinases (in a panel of 30) were significantly inhibited including p38 $\gamma$  and  $\delta$  at 10  $\mu$ M<sup>2</sup>. A potent inhibitor of inflammatory cytokine production ( $IC_{50}$ =15-25 mg/kg in mice and rats) in animal models of arthritis, bone resorption, endotoxin shock and immune function<sup>3</sup>.

- 1) Cuenda et al. (1995), SB 203580 is a specific inhibitor of a MAP kinase homologue which is stimulated by cellular stresses and interleukin-1; FEBS Lett., **364** 229
- 2) Davies et al. (2000), Specificity and mechanism of action of some commonly used protein kinase inhibitors; Biochem. J., **351** 95
- 3) Badger et al. (1996), Pharmacological profile of SB 203580, a selective inhibitor of cytokine suppressive binding protein/p38 kinase, in animal models of arthritis, bone resorption, endotoxin shock and immune function; Pharmacol. Exp. Ther., **279** 1453

## **PHYSICAL DATA**

Molecular Weight: 377.44

Molecular Formula:  $C_{21}H_{16}N_3OSF$ Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 100 mg/ml) or Ethanol (up to 10 mg/ml with warming)

Physical Description: Off-white solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.