

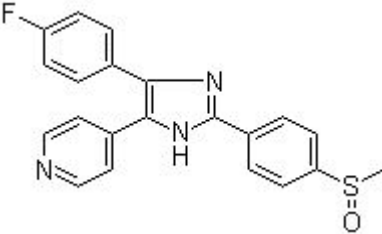


Product Introduction

SB203580

SB203580 is a **p38 MAPK** inhibitor with **IC50** of 0.3-0.5 μM , 10-fold less sensitive to SAPK3(106T) and SAPK4(106T) and blocks PKB phosphorylation with IC50 of 3-5 μM .

Technical Data:

Molecular Weight (MW):	377.43	
Formula:	C ₂₁ H ₁₆ FN ₃ OS	
Solubility (25°C)	DMSO 43 mg/mL	
* <1 mg/ml means slightly soluble or insoluble:	Water <1 mg/mL	
	Ethanol <1 mg/mL	
Purity:	>98%	
Storage:	3 years -20°C Powder 6 months-80°C in DMSO	
CAS No.:	152121-47-6	

Biological Activity

SB203580 inhibits the IL-2-induced proliferation of primary human T cells, murine CT6 T cells, or BAF F7 B cells with an IC₅₀ of 3–5 μM . SB203580 also inhibits IL-2-induced p70S6 kinase activation, although the concentration required is slightly higher with an IC₅₀ above 10 μM . SB203580 also inhibits the activity of PDK1 in a dose-dependent manner with an IC₅₀ in the 3–10 μM range. ^[1] SB203580 inhibits p38-MAPK stimulation of MAPKAPK2 with an IC₅₀ of approximately 0.07 μM , whereas inhibits total SAPK/JNK activity with an IC₅₀ of 3–10 μM . SB203580 at higher concentrations activates the ERK pathway, which

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subsequently enhances NF- κ B transcriptional activity. [2] SB203580 induces autophagy in human hepatocellular carcinoma (HCC) cells. [3]

SB203580 protects pig myocardium against ischemic injury in an in vivo model. [4] SB203580 is effective to prevent and treat the disease in MRL/lpr mice model of Systemic lupus erythematosus (SLE). [5]

First reported p38 inhibitor.

References

- [1] Ferdinand V. Lali, et al. J Biol Chem, 2000, 275(10), 7395-402.
- [2] Birkenkamp KU, et al. Br J Pharmacol, 2000, 131(1): 99-107.
- [3] Zhang H, et al. Apoptosis, 2011
- [4] Barancik M, et al. J Cardiovasc Pharmacol, 2000, 35(3), 474-83.
- [5] Jin N, et al. Int Immunopharmacol, 2011, 11(9):1319-26.



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