

SB203580 4(4-Fluorophenyl)-2-(4-methylsulfinylphenyl)-5-(4-pyridyl) 1 H-imidazole

Publication Number MAN0003446 Rev. 2.00

Catala a Namela an	DV 1740E0	
Catalog Number:	PHZ1253	
Quantity:	1.0 mg	
Lot Number:	See product label.	
Appearance:	White solid	
Molecular Formula:	$C_{21}H_{16}N_3FOS$	
Molecular Weight:	377.4	
Purity:	98%, as assessed by TLC.	
Summary:	SB203580 is a selective inhibitor of p38 mitogen-activated protein (MAP) kinase, which acts by competitively inhibiting ATP binding. This compound inhibits p38 MAPK stimulation of MAPKAPK2 (IC $_{50}$ = 70 nM) and is a useful tool for assessing the physiological roles of p38.	
Biological Activity:	K_i = 21 nM, determined by measuring competitive inhibition of ATP binding.	
Solubility:	Soluble in DMSO at a concentration of 50 mg/mL.	
Sterility:	This product is not sterile.	
Storage:	Store, as supplied, at -20° C. 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.	
References:	Cuenda, A., et al. (1995) SB203580 is a specific inhibitor of a MAP kinase homologue which is stimulated by cellular stresses and interleukin–1. FEBS Lett. 364(2) 229–233.	
	Young, P.R., et al. (1997) Pyridinyl imidazole inhibitors of p38 mitogen–activated protein kinase bind in the ATP site. J. Biol. Chem. 272(18)12116–12121.	
	Ko, B.C., et al. (2002) Fyn and p38 signaling are both required for maximal hypertonic activation of the osmotic response element-binding protein/tonicity-responsive enhancer-binding protein (OREBP/TonEBP). J. Biol. Chem. 277(48):46085–46092.	
	Kogut, M., et. al. (2002) Selective pharmacological inhibitors reveal the role of Syk tyrosine kinase, phospholipase C, phosphatidylinositol-3'-kinase, and p38 mitogen-activated protein kinase in Fc receptor–mediated signaling of chicken herophil degranulation. Int. Immunopharmacol. 2(7):963–973.	
	Knebel, A., et al. (2002) Stress–induced regulation of eukaryotic elongation factor 2 kinase by SB203580–sensitive and –insensitive pathways. Biochem. J. 367(Pt 2):525–532.	

Related Products:

Product	Catalog no.
p38 [pTpY ^{180/182}] antibody	44-684
MEK3/6 [pSpT ^{189/193}]/[pSpT ^{207/211}] antibody	44-470

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
Ω	Use by
***	Manufacturer
[-]	Without, does not contain
evel feet	Protect from light
<u> </u>	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
LOT	Batch code
IVD	In vitro diagnostic medical device
X	Temperature limitation
EC REP	European Community authorized representative
[+]	With, contains
<u> </u>	Consult accompanying documents

Limited Use Label License: Research Use Only

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