SB203580

Protein kinase inhibitor

Cell permeable, specific inhibitor of p38 (SAPK2a). Inhibits p38 MAPK stimulation of MAPKAPK2 (IC_{50}=70nM). Can inhibit the key cell cycle event of retinoblastoma protein phosphorylation in interleukin-2-stimulated T cells. Studies on the proximal regulator of this event, the PI(3)K (phosphoinositide 3-kinase)/Akt (protein kinase B; PKB) pathway, showed that SB203580 blocks the phosphorylation and activation of Akt by inhibiting the Akt kinase, phosphoinositide-dependent protein kinase 1 (PDK1).

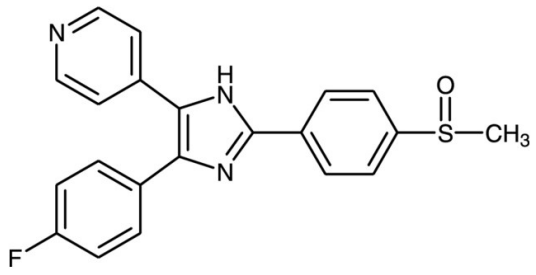
The concentrations of SB203580 required to block Akt phosphorylation (IC_{50}= 3-5μM) are only approximately 10-fold higher than those required to inhibit p38 MAP kinase (IC_{50}=0.3-0.5μM). These data define a new activity for this drug and suggest that extreme caution should be used when interpreting data when SB203580 has been used at concentrations above 1-2μM. Non-specific effects include inhibition of COX-1 and -2. Enhances clonal growth of skin epithelial progenitor cells and stimulates neural stem cell proliferation.

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Ordering Information Order Online »

BML-EI286-0001	1mg
BML-EI286-0005	5mg

Manuals, SDS & CofA View Online »

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	4-(4-Fluorophenyl)-2-(4-methylsulfinylphenyl)-5-(4-pyridyl)1H-imidazole
Appearance	White to off-white powder.
CAS	152121-47-6
Couple Target	p38, Phosphoinositide-dependent protein kinase
Couple Type	Inhibitor
Formula	$C_{21}H_{16}N_3FOS$
MW	377.4
Purity	≥97% (HPLC)
Solubility	Soluble in DMSO (50mg/ml).
Technical Info / Product Notes	Replacement for **ADI-HPK-110**

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