Cat No. 42-F97

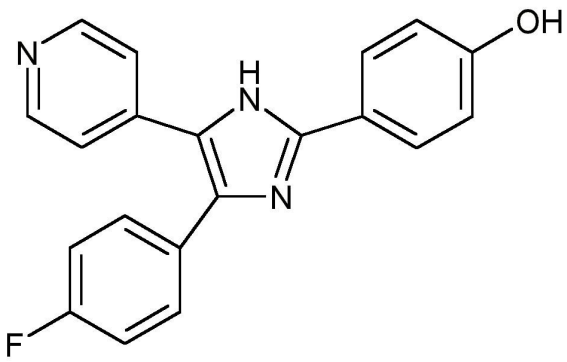
SB202190

5 mg

For research purposes only

SB202190 is a pyridinyl imidazole that inhibits p38 kinase *in vivo* through competition with ATP. It binds within the ATP pocket of the active kinase and selectively inhibits p38α and β isoforms. SB202190 induces apoptosis through the activation of cysteine protease (CPP32) like kinases. SB202190 has been shown to block both lipopolysaccharide (LPS) induced gene expression and nitric oxide (NO) induced stabilization of interleukin (IL) -8 mRNA in monocytes.

TECHNICAL INFORMATION



Other Names: 4-(4-Fluorophenyl)-2-(4-hydroxyphenyl)-5-(4-pyridyl)-1H-imidazole

Chemical Formula: $C_{20}H_{14}FN_3O$

CAS Number: 152121-30-7

Molecular Weight: 331.34

Purity: >98%

Appearance: off white solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO at 30mg/ml. If precipitate is observed, vortex for 5 minutes.

REFERENCES

1. Young et al. (1997) Pyridinyl imidazole inhibitors of p38 mitogen-activated protein kinase bind in the ATP site. J Biol Chem. 272(18): 12116-21.
2. Nemoto et al. (1998) Induction of apoptosis by SB202190 through inhibition of p38beta mitogen-activated protein kinase. J Biol Chem. 273(26):16415-20.
3. Hirosawa et al. (2009) The p38 pathway inhibitor SB202190 activates MEK/MAPK to stimulate the growth of leukemia cells. Leuk Res. 33(5):693-9.
4. Muniyappa et al. (2008) Activation of c-Jun N-terminal kinase (JNK) by widely used specific p39 MAPK inhibitors SB202190 and SB20350: a MLK-3-MKK7-dependent mechanism. Cell Signal. 20(4):675-83.