

SB-505124 (hydrochloride)

Catalog No: tcsc1583



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

356559-13-2

Formula:

$C_{20}H_{22}ClN_3O_2$

Pathway:

TGF-beta/Smad

Target:

TGF- β Receptor

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

371.86

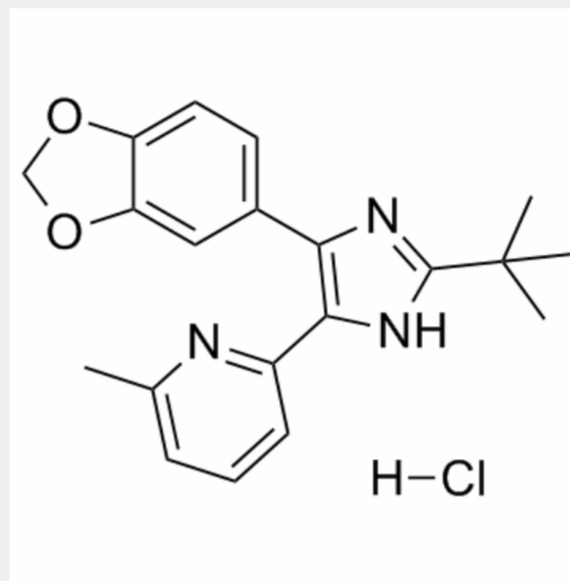
Product Description

SB-505124 hydrochloride is a selective inhibitor of **TGF β R** with **IC₅₀** of 129 nM and 47 nM for **ALK4, ALK5**, respectively, and it does not inhibit ALK1, 2, 3, or 6 but ALK7.

IC50 & Target: IC50: 129 nM (ALK4), 47 nM (ALK5)

In Vitro: SB-505124 demonstrates no toxicity to renal epithelial A498 cells at concentrations up to 100 μ M for 48 h. 505124 inhibits

the closely related ALK4 with an IC_{50} value of 129 ± 11 nM (about 2.5-fold less sensitive than ALK5) but does not inhibit ALK2 at concentrations up to $10 \mu\text{M}$. SB-505124 ($1 \mu\text{M}$) inhibits the TGF- β -induced phosphorylation of Smad2 in all three of these cell lines in a concentration-dependent fashion. SB-505124 (1 or $5 \mu\text{M}$) potently inhibits TGF- β -induced activation of JNK/SAP, extracellular signal-regulated kinase 1/2, and p38 despite the different patterns of activation in these cells^[1]. SB-505124 ($10 \mu\text{M}$) impairs Smad2 phosphorylation and CTGF and α -SMA expression in vitro^[2]. SB-505124 suppresses CTGF and α -SMA observed by immunofluorescence. Cell outgrowth from explants dissected from eyes to which SB-505124 is applied during GFS is robust while outgrowth is poor from those treated with MMC^[3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!