

# SB-505124

**Catalog No: tcsc1582** 

Available Sizes

Size: 10mg

Size: 50mg

Ξ

**Specifications** 

**CAS No:** 694433-59-5

094400-09-0

#### Formula:

 $C_{20}H_{21}N_{3}O_{2}$ 

# Pathway:

TGF-beta/Smad

#### **Target:**

TGF-β Receptor

### Purity / Grade:

>98%

# **Observed Molecular Weight:**

335.4

# **Product Description**

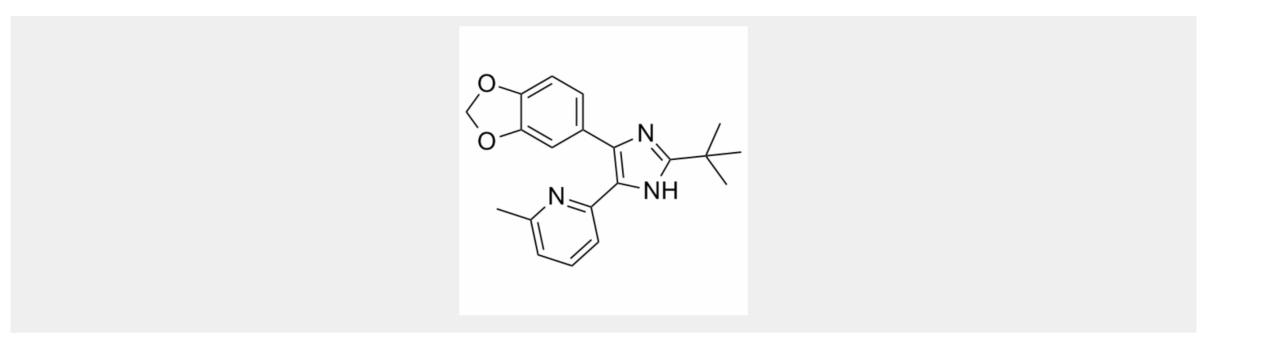
SB-505124 is a selective inhibitor of **TGFβR** with **IC**<sub>50</sub> of 129 nM and 47 nM for **ALK4**, **ALK5**, respectively, and it does not inhibits ALK1, 2, 3, or 6 but ALK7.

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 µM for 48 h. 505124 inhibits



the closely related ALK4 with an IC<sub>50</sub> value of 129±11 nM (about 2.5-fold less sensitive than ALK5) but does not inhibit ALK2 at concentrations up to 10  $\mu$ M. SB-505124 (1  $\mu$ M) inhibits the TGF- $\beta$ -induced phosphorylation of Smad2 in all three of these cell lines in a concentration-dependent fashion. SB-505124 (1 or 5  $\mu$ M) potently inhibits TGF- $\beta$ -induced activation of JNK/SAP, extracellular signal-regulated kinase 1/2, and p38 despite the different patterns of activation in these cells<sup>[1]</sup>. SB-505124 (10  $\mu$ M) impairs Smad2 phosphorylation and CTGF and  $\alpha$ -SMA expression in vitro<sup>[2]</sup>. SB-505124 susspresses CTGF and  $\alpha$ -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<sup>[3]</sup>.



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

Copyright 2021 Taiclone Biotech Corp.