

Data Sheet

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 SB-431542

 Cat. No.
 :
 PC-42581

 CAS No.
 :
 301836-41-9

 Molecular Formula
 :
 C₂₂H₁₆N₄O₃

 Molecular Weight
 :
 384.3875

Target : TGF beta Receptor (TGFBR)

Solubility:

H₂N HN N

Biological Activity

SB-431542 is a potent, specific **TGF-β type I receptor (ALK5)** inhibitor with IC50 of 94 nM.

SB-431542 also substantially inhibits ALK4 and 7, but not other ALKs.

SB-431542 efficiently inhibits the ability of activated ALK4, ALK5, and ALK7 to phosphorylate Smad2.

SB-431542 is a selective inhibitor of endogenous activin and TGF-beta signaling but has no effect on BMP signaling, and has no effect on components of the ERK, JNK, or p38 MAP kinase pathways.

References

Callahan JF, et al. *J Med Chem*. 2002 Feb 28;45(5):999-1001.

Inman GJ, et al. *Mol Pharmacol*. 2002 Jul;62(1):65-74.

Matsuyama S, et al. Cancer Res. 2003 Nov 15;63(22):7791-8.

Hjelmeland MD, et al. Mol Cancer Ther. 2004 Jun;3(6):737-45.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com