

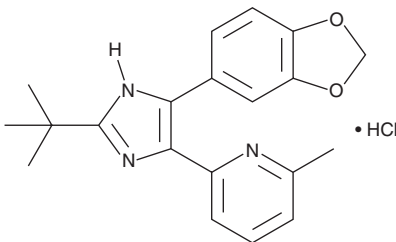
PRODUCT INFORMATION



SB-505124 (hydrochloride)

Item No. 42056

CAS Registry No.: 356559-13-2
Formal Name: 2-[4-(1,3-benzodioxol-5-yl)-2-(1,1-dimethylethyl)-1H-imidazol-5-yl]-6-methyl-pyridine, monohydrochloride
Synonyms: TGF- β Receptor Type I Kinase Inhibitor III, TGF- β RI Kinase Inhibitor III
MF: C₂₀H₂₁N₃O₂ • HCl
FW: 371.9
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SB-505124 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the SB-505124 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. SB-505124 (hydrochloride) is slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

SB-505124 is an inhibitor of activin receptor-like kinase 5 (ALK5), also known as TGF- β receptor type 1 (TGF- β RI), and ALK4 (IC₅₀s = 47 and 129 nM, respectively).¹ It is selective for ALK5 and ALK4 over a panel of 27 kinases at 10 μ M. SB-505124 (5 μ M) also inhibits ALK7-induced increases in phosphorylated SMAD2 levels in COS-1 cells overexpressing ALK7. It inhibits TGF- β -induced but not TNF- α -induced apoptosis in Fao hepatocellular carcinoma cells when used at a concentration of 1 μ M. SB-505124 (5 mg/eye) decreases intraocular pressure (IOP) and subconjunctival immune cell infiltration in a rabbit model of trabeculectomy.²

References

1. DaCosta Byfield, S., Major, C., Laping, N.J., *et al.* SB-505124 is a selective inhibitor of transforming growth factor- β type I receptors ALK4, ALK5, and ALK7. *Mol. Pharmacol.* **65**(3), 744-752 (2004).
2. Sapiro, J., Dunmire, J.J., Scott, S.E., *et al.* Suppression of transforming growth factor- β effects in rabbit subconjunctival fibroblasts by activin receptor-like kinase 5 inhibitor. *Mol. Vis.* **16**, 1880-1892 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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