SB-525334

ALK5 inhibitor

SB-525334 is a potent inhibitor of the transforming growth factor β 1 receptor (ALK5). It has an IC50 of 14.3 nM for ALK5.

Key features and applications include:

- High Selectivity: Specifically inhibits ALK5 with minimal activity against other ALK receptors.
- **Potency:** Demonstrates strong inhibitory effects with an IC50 of 14.3 nM.
- Block Phosphorylation and Nuclear Translocation of Smad2/3: This inhibition reduces PAI-1 and procollagen α1 (I) mRNA expression in renal epithelial carcinoma cells.
- Reduce Fibrosis: Effective in models of pulmonary fibrosis and renal disease by decreasing TGF-β-mediated responses.
- Attenuate Pulmonary Arterial Hypertension: Lowers pulmonary arterial pressure and right ventricular hypertrophy in relevant models.

Relevant disease states include:

- Pulmonary Fibrosis: Reduces myofibroblast proliferation and fibrosis.
- Renal Disease: Decreases markers of fibrosis in renal epithelial carcinoma cells.
- Pulmonary Arterial Hypertension: Mitigates symptoms by reducing TGF-β sensitivity.

Ordering Information

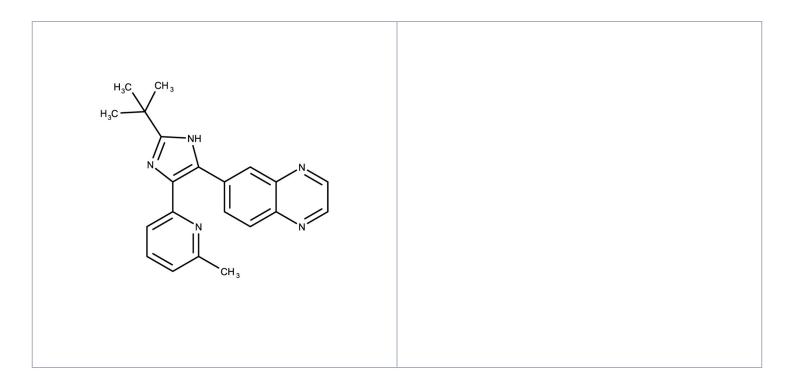
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ENZ-CHM492-0025 25mg

Manuals, SDS & CofA

View Online »

• GMP format available



Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended. Solutions in DMSO

may be stored at -20°C for up to 3 months.

Handling Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area

accessible only to qualified or authorized persons

Short Term Storage -20°C

Long Term Storage -20°C

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name 6-[2-(1,1-Dimethylethyl)-5-(6-methyl-2-pyridinyl)-1H-

imidazol-4-yl]quinoxaline

Appearance Yellow solid.

CAS 356559-20-1

Couple Target Activin receptor, TGF-beta receptor

Couple Type Inhibitor

Formula $C_{21}H_{21}N_5$

Identity Determined by NMR.

MW 343.42

Purity ≥98% (HPLC)

Soluble in DMSO (up tp 30 mg/ml).

