

Product Name: SB 525334

Catalog No.: 3211

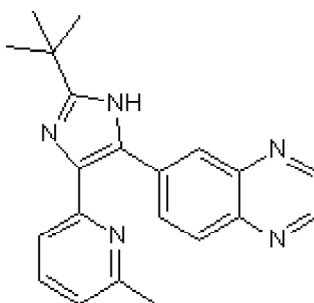
Batch No.: 4

CAS Number: 356559-20-1

IUPAC Name: 6-[2-(1,1-Dimethylethyl)-5-(6-methyl-2-pyridinyl)-1H-imidazol-4-yl]quinoxaline

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₁N₅·½H₂O
Batch Molecular Weight: 352.43
Physical Appearance: Orange solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Dichloromethane:Methanol [95:5])
HPLC: Shows >99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	71.57	6.29	19.87
Found	71.7	6.17	19.68

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

SB 525334 is a selective inhibitor of transforming growth factor- β receptor I (ALK5, TGF- β RI) (IC_{50} = 14.3 nM). Inhibits TGF- β 1-induced smad2/3 nuclear localization and TGF- β RI-induced mRNA expression in kidney cells. Attenuates bleomycin-induced pulmonary fibrosis.

Physical and Chemical Properties:

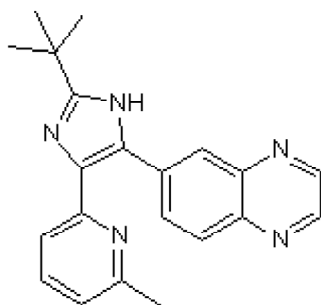
Batch Molecular Formula: $C_{21}H_{21}N_5 \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 352.43

Physical Appearance: Orange solid

Minimum Purity: $\geq 97\%$

Batch Molecular Structure:



References:

Higashiyama et al (2007) Inhibition of AVNreceptor-like kinase 5 attenuates bleomycin-induced pulmonary fibrosis *Exp.Mol.Pathol.* **83** 39. PMID: 17274978.

Laping et al (2007) Tumor-specific efficacy of transforming growth factor- β RI inhibition in eker rats. *Clin.Cancer Res.* **13** 3087. PMID: 17505012.

Grygielko et al (2005) Inhibition of gene markers of fibrosis with a novel inhibitor of transforming growth factor- β type I receptor kinase in puromycin-induced nephritis. *J.Pharmacol.Exp.Ther.* **313** 943. PMID: 15769863.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold with the permission of GlaxoSmithKline

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