

Catalog	Unit
TBI2983-5MG	5 mg
TBI2983-25MG	25 mg

### Product Details

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

**Molecular Formula:** C<sub>21</sub>H<sub>21</sub>N<sub>5</sub>

**Formula Weight:** 343.42

**CAS Number:** 356559-20-1

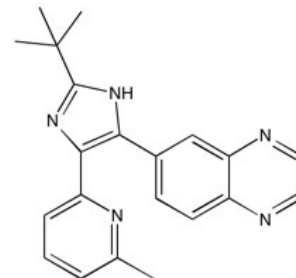
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 30 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

ALK5 (TGF bR1) inhibitor

### Functions

Potent and selective inhibitor of the transforming growth factor beta 1 receptor, activin receptor-like kinase (ALK5), IC<sub>50</sub> = 14.3 nM and ALK4 (IC<sub>50</sub> = 58.5 nM) with no activity at ALK2, 3 and 61. Blocks fibrosis markers and renal injury in the puromycin-induced nephritis model. It causes significant attenuation in Smad2/3 nuclear translocation, decrease in CTGF-expressing cells, myofibroblast proliferation and type 1 collagen deposition resulting in an overall attenuation in bleomycin-induced pulmonary fibrosis. Sensitizes drug-resistant pancreatic cancer cells to gemcitabine. Cell permeable and active in vivo.

### Application Procedures

First dissolved in DMSO (up to 30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**