

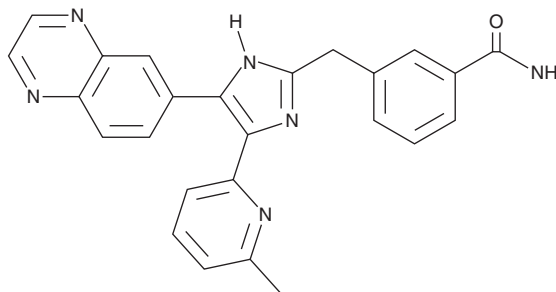
PRODUCT INFORMATION



IN 1130

Item No. 43285

CAS Registry No.: 868612-83-3
Formal Name: 3-[[5-(6-methyl-2-pyridinyl)-4-(6-quinoxaliny)-1H-imidazol-2-yl]methyl]-benzamide
MF: C₂₅H₂₀N₆O
FW: 420.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

IN 1130 is supplied as a solid. A stock solution may be made by dissolving the IN 1130 in the solvent of choice, which should be purged with an inert gas. IN 1130 is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

IN 1130 is an inhibitor of activin receptor-like kinase 5 (ALK5), also known as TGF-β receptor type 1 (TGF-βRI; IC₅₀ = 5.3 nM).¹ It is selective for ALK5 over a panel of 27 other kinases at 5 μM. IN 1130 (10 mg/kg per day) decreases renal fibrogenesis, inflammatory cell infiltration, and tubular atrophy in a mouse model of unilateral ureteral obstruction. It also reduces kidney levels of TGF-β1, α-smooth muscle actin (α-SMA), hydroxyproline, and fibronectin in the same model. IN 1130 (5 mg/kg per day) decreases tunica plaque area, increases elastin fiber numbers, and reverses penile curvature in a rat model of Peyronie's disease induced by TGF-β1 overexpression.²

References

1. Moon, J.-A., Kim, H.-T., Cho, I.-S., *et al.* IN-1130, a novel transforming growth factor-β type I receptor kinase (ALK5) inhibitor, suppresses renal fibrosis in obstructive nephropathy. *Kidney Int.* **70**(7), 1234-1243 (2006).
2. Ryu, J.-K., Piao, S., Shin, H.-Y., *et al.* IN-1130, a novel transforming growth factor-beta type I receptor kinase (activin receptor-like kinase 5) inhibitor, promotes regression of fibrotic plaque and corrects penile curvature in a rat model of Peyronie's disease. *J. Sex Med.* **6**(5), 1284-1296 (2009).

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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