

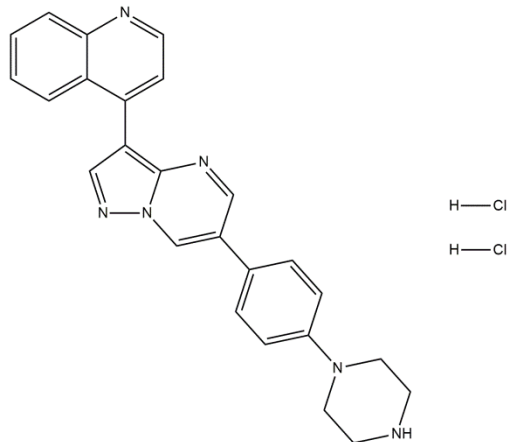
LDN-193189 hydrochloride

02/20

ALTERNATE NAME: 4-(6-(4-(piperazin-1-yl)phenyl)pyrazolo[1,5-a]pyrimidin-3-yl)quinoline dihydrochloride

CATALOG #: B2986-1 1 mg
B2986-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₅H₂₄Cl₂N₆

MOLECULAR WEIGHT: 479.4

CAS NUMBER: 1435934-00-1

APPEARANCE: Yellow Powder

PURITY: >98%

SOLUBILITY: ~5 mg/ml in DMSO

DESCRIPTION: LDN-193189 inhibits transcriptional activity of the (Bone Morphogenetic Protein) BMP type I receptors known as activin receptor-like kinases (ALKs). It inhibits ALK2 and ALK3 with IC₅₀ values of 5 nM and 30 nM respectively and shows weaker effects on activin and the TGF-β type I receptors ALK4, ALK5 and ALK7. It inhibits phosphorylation of the BMP signaling effectors SMAD1, SMAD5 and SMAD8 with IC₅₀ value of 5 nM. LDN-193189 significantly reduces tumor growth in SCID mice bearing MDA-PCa-118b tumors.

STORAGE TEMPERATURE: -20°C. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

REFERENCES:

1. Yu, P.B., Deng, D.Y., Lai, C.S., et al. BMP type I receptor inhibition reduces heterotopic ossification. *Nature Medicine* 14(12), 1363-1369 (2008).
2. Lee, Y.C., Cheng, C.J., Bilen, M.A., et al. BMP4 promotes prostate tumor growth in bone through osteogenesis. *Cancer Research* 71(15), 5194-5203 (2011).

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

K02288 (Cat. No. B2321)
 LDN-212854 (Cat. No. B2641)
 DMH-1 (Cat. No. 9542)
 EZSolution™ LDN193189 (Cat. No. 2092)
 LDN193189 (Cat. No. 1995)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**