

Product Name: LDN 193189 in solution

Catalog No.: 8150

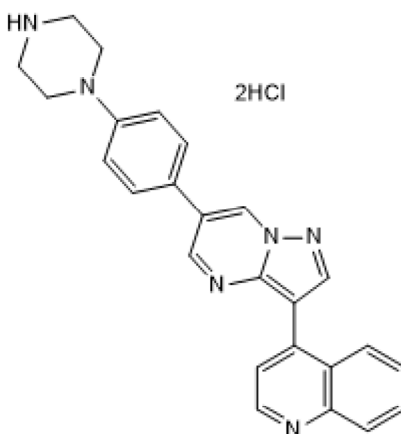
Batch No.: 1

CAS Number: 1435934-00-1

IUPAC Name: 4-[6-[4-(1-Piperaziny)phenyl]pyrazolo[1,5-a]pyrimidin-3-yl]quinoline dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

|                            |  |
|----------------------------|--|
| Batch Molecular Formula:   | C <sub>25</sub> H <sub>22</sub> N <sub>6</sub> ·2HCl                 |
| Batch Molecular Weight:    | 479.41   |
| Physical Appearance:       | Yellow solution  |
| Solubility:                | Soluble in water (supplied pre-dissolved at a concentration of 10mM) |
| Storage:                   | Store at -20°C   |
| Batch Molecular Structure: |  |



## 2. ANALYTICAL DATA

|       |                    |
|-------|--------------------|
| HPLC: | Shows 99.9% purity |
|-------|--------------------|

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

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**Batch No.:** 1

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**Description:**

LDN 193189 in solution is a convenient and ready-to-use 10 mM sterile-filtered solution of LDN 193189 pre-dissolved in water. A potent and selective ALK2 and ALK3 inhibitor (IC<sub>50</sub> values are 5 nM and 30 nM, respectively); inhibits BMP4-mediated Smad1/5/8 activation. Promotes neural induction of hPSCs in combination with SB 431542 (Cat. No. 1614). Also induces differentiation of hPSCs into nociceptive sensory neurons in combination with SB 431542 (Cat. No. 1614), SU 5402 (Cat. No. 3300), CHIR 99021 (Cat. No. 4423) and DAPT (Cat. No. 2634). Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description

**Physical and Chemical Properties:**

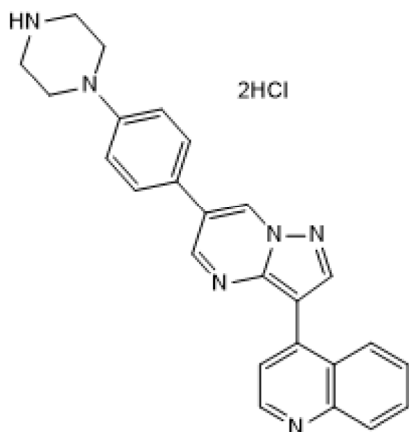
Batch Molecular Formula: C<sub>25</sub>H<sub>22</sub>N<sub>6</sub>·2HCl

Batch Molecular Weight: 479.41

Physical Appearance: Yellow solution

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**



**Solubility & Usage Info:**

Water (supplied pre-dissolved at a concentration of 10mM)  
This product is supplied as a 10mM sterile-filtered solution in water. Standard retail vials are 6mg of LDN 193189 dihydrochloride in at least 1.2ml of water.

**Stability and Storage Advice:**

For long-term storage, it is recommended to store this product at -20°C or below, away from light. The product can be stored for up to 6 months from date of receipt.

We recommend that stock solutions are stored in single-use aliquots in tightly sealed vials at -20°C, away from light.

The product can also be stored for up to 4 weeks at +4°C away from light.

**Licensing Information:**

Sold for research purposes under exclusive agreement from The Brigham and Women's Hospital Inc. US patents 8,507,501 and 9,045,484

**References:**

**Lancaster et al** (2015) Generation of cerebral organoids from human pluripotent stem cells. *Nat.Protoc.* **9** 2329. PMID: 25188634.

**Li et al** (2013) Chemical approaches to stem cell biology and therapeutics. *Cell Stem Cell* **13** 270. PMID: 24012368.

**Chambers et al** (2012) Combined small-molecule inhibition accelerates developmental timing and converts human pluripotent stem cells into nociceptors. *Nat.Biotechnol.* **30** 705. PMID: 22750882.

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