

**Product Name:** MSC 1186

**Catalog No.:** 7927

**Batch No.:** 1

CAS Number: 2871698-23-4

IUPAC Name: *N*-[3-[[[2-(6-Chloro-7-fluoro-1*H*-benzimidazol-2-yl)-4-pyrimidinyl]amino]methyl]-2-pyridinyl]-*N*-methylmethanesulfonamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>19</sub>H<sub>17</sub>ClFN<sub>7</sub>O<sub>2</sub>S·½H<sub>2</sub>O

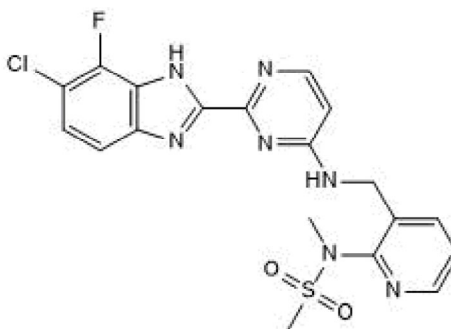
**Batch Molecular Weight:** 470.91

**Physical Appearance:** Pale beige solid

**Solubility:** DMSO to 50 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.7% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	48.46	3.85	20.82
Found	47.6	3.93	20.22

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**Description:**

MSC1186 is a potent and selective inhibitor of serine arginine protein kinases (SRPK) 3, 1 and 2 (IC<sub>50</sub> values are 0.6 nM, 3 nM and 81 nM respectively in biochemical assay; EC<sub>50</sub> values in NanoBRET assay are 40 nM, 98 nM and 149 nM, respectively). Shows no activity at CLK and DYRK families (IC<sub>50</sub> >10 μM).

**Physical and Chemical Properties:**

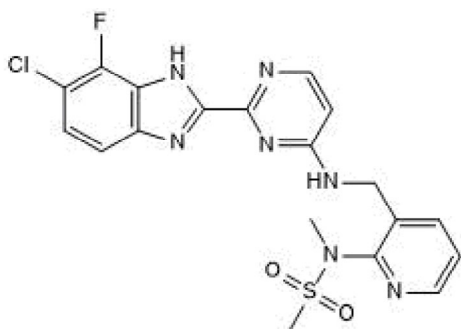
Batch Molecular Formula: C<sub>19</sub>H<sub>17</sub>ClFN<sub>7</sub>O<sub>2</sub>S·½H<sub>2</sub>O

Batch Molecular Weight: 470.91

Physical Appearance: Pale beige solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

Schröder *et al* (2023) MSC-1186, a highly selective pan-SRPK inhibitor based on an exceptionally decorated benzimidazole-pyrimidine core. *J.Med.Chem.* **66** 837. PMID: 36516476.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 50 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:**

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the MSC 1186 probe summary on the SGC website.

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