

MS4078

## Chemical Properties

CAS No. : 2229036-62-6

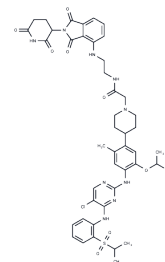
Formula: C<sub>45</sub>H<sub>52</sub>ClN<sub>9</sub>O<sub>8</sub>S

Molecular Weight: 914.47

Keep away from direct sunlight

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	MS4078 is an inhibitor and aplastic lymphoma kinase (ALK) PROTAC (degrader) based on Cereblon ligand, with a K <sub>d</sub> of 19nM for binding affinity to ALK.
Targets(IC <sub>50</sub> )	ALK,PROTACs
In vitro	MS4078 effectively inhibits cancer cell proliferation by inducing ALK protein degradation via a cereblon and proteasome-dependent mechanism. In SU-DHL-1 cells, it shows an IC <sub>50</sub> of 33 nM, and potently reduces ALK fusion protein levels, inhibits ALK auto-phosphorylation, and downstream STAT3 phosphorylation in a concentration-dependent manner. It specifically reduces NPM-ALK protein levels in SU-DHL-1 cells (DC <sub>50</sub> of 11 nM) and EML4-ALK protein levels in NCI-H2228 cells (DC <sub>50</sub> of 59 nM).

## Solubility Information

Solubility	DMSO: 150 mg/mL (164.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0935 mL	5.4676 mL	10.9353 mL
5 mM	0.2187 mL	1.0935 mL	2.1871 mL
10 mM	0.1094 mL	0.5468 mL	1.0935 mL
50 mM	0.0219 mL	0.1094 mL	0.2187 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang C, et al. Proteolysis Targeting Chimeras (PROTACs) of Anaplastic Lymphoma Kinase (ALK). Eur J Med Chem. 2018 May 10;151:304-314.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481