

MRT67307 HCl (1190378-57-4(free base))

## Chemical Properties

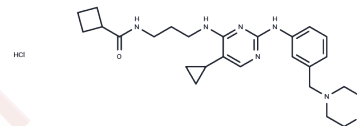
CAS No. :

Formula: C<sub>26</sub>H<sub>37</sub>ClN<sub>6</sub>O<sub>2</sub>

Molecular Weight: 501.07

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	MRT67307 is a kinase inhibitor of TBK1, MARK1-4, IKKε, and NUA1 (IC <sub>50</sub> : 19, 27-52, 160, and 230 nM, respectively).
Targets(IC <sub>50</sub> )	AMPK, Autophagy, IκB/IKK

## Solubility Information

Solubility	H <sub>2</sub> O: 10 mg/mL (19.96 mM), Sonication is recommended. DMSO: 50 mg/mL (99.79 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	1.9957 mL	9.9786 mL	19.9573 mL
5 mM	0.3991 mL	1.9957 mL	3.9915 mL
10 mM	0.1996 mL	0.9979 mL	1.9957 mL
50 mM	0.0399 mL	0.1996 mL	0.3991 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

- Clark K, et al. Novel cross-talk within the IKK family controls innate immunity. *Biochem J.* 2011 Feb 15;434(1):93-104.
- Zhao L, Xia M, Wang K, et al. A Long Non-coding RNA IVRPIE Promotes Host Antiviral Immune Responses Through Regulating Interferon  $\beta$ 1 and ISG Expression. *Frontiers in Microbiology.* 2020, 11: 260
- Liang X, Du W, Huang L, et al. Helicobacter pylori promotes gastric intestinal metaplasia through activation of IRF3-mediated kynurenine pathway. *Cell Communication and Signaling.* 2023, 21(1): 1-14.
- Petherick KJ, et al. Pharmacological inhibition of ULK1 kinase blocks mammalian target of rapamycin (mTOR)-dependent autophagy. *J Biol Chem.* 2015 May 1;290(18):11376-83.
- Clark K, et al. Phosphorylation of CRTC3 by the salt-inducible kinases controls the interconversion of classically activated and regulatory macrophages. *Proc Natl Acad Sci U S A.* 2012 Oct 16;109(42):161986-91.
- Zhao L, Xia M, Wang K, et al. A Long Non-coding RNA IVRPIE Promotes Host Antiviral Immune Responses Through Regulating Interferon  $\beta$ 1 and ISG Expression[J]. *Frontiers in Microbiology.* 2020, 11: 260.

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