
Product Data Sheet

Product Name: MRT67307 HCl

Cat. No.: GC25650

Chemical Properties

Cas. No. 1781882-89-0

| | | | |
|---------|--|------|----------------------|
| Formula | C ₂₆ H ₃₆ N ₆ O ₂ · xHCl | M.Wt | 464.6 (free-base) |
|---------|--|------|----------------------|

| | | | |
|------------|--|---------|----------------|
| Solubility | DMSO: 92 mg/mL (198.02 mM);Water: 92 mg/mL (198.02 mM);Ethanol: 92 mg/mL (198.02 mM) | Storage | Store at -20°C |
|------------|--|---------|----------------|

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

MRT67307 is a potent and dual IKK ϵ and TBK1 inhibitor with IC₅₀ of 160 and 19 nM, respectively. MRT67307 potently inhibits ULK1 and ULK2 and blocks autophagy.

In macrophages, MRT67307 prevents the phosphorylation of IRF3 and the production of IFN β . In wild-type MEFs, MRT67307 enhances the IL-1-stimulated phosphorylation of p105 at Ser933 and RelA at both Ser468 and Ser536, and also enhances IL-1-stimulated activation of NF- κ B-dependent gene transcription. [1] MRT67307 increases IL-10 production and suppresses proinflammatory cytokine production via a cAMP response element-Binding protein (CREB)-regulated transcriptional coactivator (CRTC) 3 Dependent Mechanism. [2] In addition, MRT67307 inhibit ULK and block autophagy in MEF cells. [3]

[1] Clark K, et al. Biochem J. 2011, 434(1), 93-104. [2] Clark K, et al. Proc Natl Acad Sci U S A. 2012, 109(42), 16986-16991. [3] Petherick KJ, et al. J Biol Chem. 2015, 290(18), 11376-11383.

Caution: Product has not been fully validated for medical applications. For research use only.

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