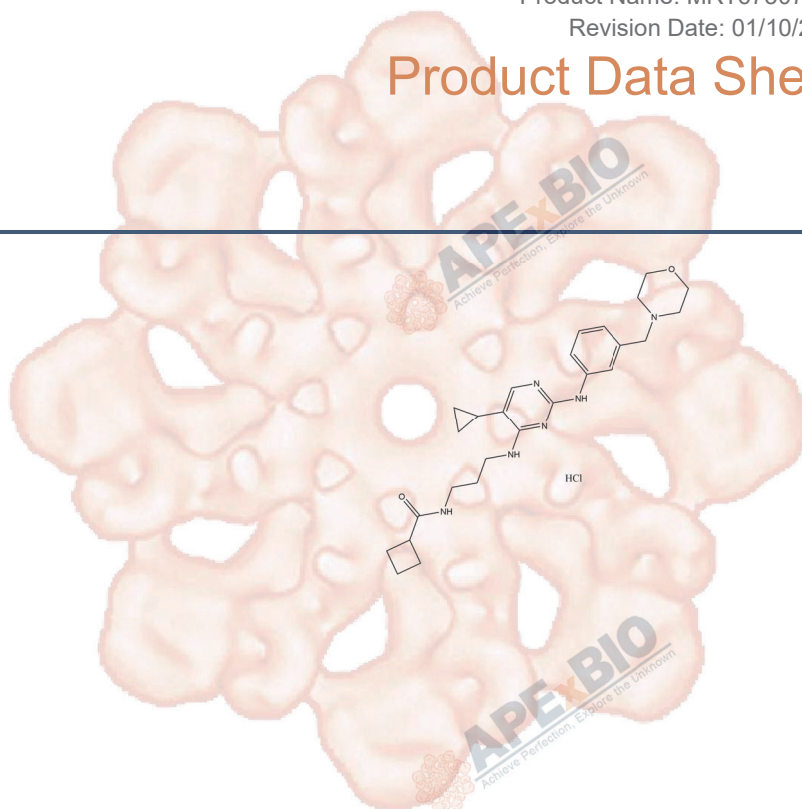


# Product Data Sheet

## MRT67307 HCl

|                  |   |
|------------------|---|
| <b>Cat. No.:</b> | A3635   |
| <b>CAS No.:</b>  | 2095432-39-4  |
| <b>Formula:</b>  | C <sub>26</sub> H <sub>37</sub> CIN <sub>6</sub> O <sub>2</sub> |
| <b>M.Wt:</b>     | 501.07  |
| <b>Synonyms:</b> | MRT 67307;MRT-67307   |
| <b>Target:</b>   | Immunology/Inflammation   |
| <b>Pathway:</b>  | IκB/IKK   |
| <b>Storage:</b>  | Store at -20° C   |



## Solvent & Solubility

≥23.25 mg/mL in DMSO; ≥30.67 mg/mL in EtOH; ≥52.5 mg/mL in H<sub>2</sub>O with gentle warming

| In Vitro | Preparing Stock Solutions | Mass                 |           |            |            |
|----------|---------------------------|----------------------|-----------|------------|------------|
|          |                           | Solvent              | 1mg       | 5mg        | 10mg       |
|          |                           | <b>Concentration</b> |           |            |            |
|          |                           | <b>1 mM</b>          | 2.1524 mL | 10.7619 mL | 21.5239 mL |
|          |                           | <b>5 mM</b>          | 0.4305 mL | 2.1524 mL  | 4.3048 mL  |
|          |                           | <b>10 mM</b>         | 0.2152 mL | 1.0762 mL  | 2.1524 mL  |

Please refer to the solubility information to select the appropriate solvent

## Biological Activity

|                           |                             |   |
|---------------------------|-----------------------------|---|
| Shortsummary              | SIK/TBK-1/IKKe inhibitor    |   |
| IC <sub>50</sub> & Target |                             |   |
| In Vitro                  | <b>Cell Viability Assay</b> |   |
|                           | Cell Line:                  | Mouse bone-marrow-derived macrophages   |
|                           | Preparation method:         | The solubility of this compound in DMSO is >23.3 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months. |
|                           | Reacting conditions:        | 0-10000 nM  |

|         |                          |   |
|---------|--------------------------|---|
|         | Applications:            | Treatment of macrophages with MRT67307 led to an increase in the poly(I:C)- and LPS-stimulated phosphorylation of p105 and RelA and enhanced NF- $\kappa$ B transcriptional activity. In addition, MRT67307 prevented the production of IFN $\beta$ and the phosphorylation of IRF3 without suppressing the activation of NF- $\kappa$ B, which showed that MRT67307 blocked the induction of Pellino 1 through inhibiting TBK1/IKK $\epsilon$ kinase activity. |
| In Vivo | <b>Animal experiment</b> |   |
|         | Applications:            |   |

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

[1] Clark K, et al. Novel cross-talk within the IKK family controls innate immunity. *Biochem J.* 2011 Feb 15;434(1):93-104.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*



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