## **Product** Data Sheet

## MM3122

Cat. No.:HY-148072CAS No.:2574390-27-3Molecular Formula: $C_{31}H_{39}N_9O_6S$ Molecular Weight:665.76Target:SARS-CoV

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	MM3122 is a selective type II transmembrane serine protease (TMPRSS2) inhibitor with an IC <sub>50</sub> value of 0.34 nM. MM3122 effectively blocks TMPRSS2, thereby inhibiting the entry of SARS-CoV-2 and MERS-CoV into human cells <sup>[1]</sup> .
In Vitro	MM3122 (0-1 $\mu$ M) has inhibitory activity against HGFA, matriptase, hepsin and thrombin with the IC $_{50}$ values of 32, 0.31, 0.19 and more than 20 nM, respectively <sup>[1]</sup> . MM3122 (0.1-100 $\mu$ M) inhibits SARS-CoV-2 calu-3, VSV-SARS CoV-2 chimera calu-3 and MERS VSV pseudotype calu-3 with the EC $_{50}$ values of 74, 0.43 and 0.87 nM, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	MM3122 (i.p., 0-100 mg/kg, daily, 7 days) has no adverse effects, no weight loss or changes in harvested organs (liver, spleen and kidney) compared to controls in NOD-scid IL2Rgnull (NSG) mice <sup>[1]</sup> .  MM3122 (i.p., 16.7 mg/kg, once) has a half-life of 8.6 hours in plasma and 7.5 hours in lung of NSG mice <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Matthew Mahoney, et al. A novel class of TMPRSS2 inhibitors potently block SARS-CoV-2 and MERS-CoV viral entry and protect human epithelial lung cells. Proc Natl Acad Sci U S A. 2021 Oct 26;118(43):e2108728118.

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

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