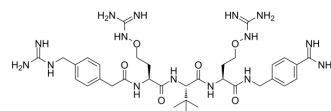


MI-1851

| | |
|---------------------------|---|
| Cat. No.: | HY-150737 |
| CAS No.: | 2417283-44-2 |
| Molecular Formula: | C ₃₄ H ₅₃ N ₁₅ O ₆ |
| Molecular Weight: | 767.88 |
| Target: | SARS-CoV |
| Pathway: | Anti-infection |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|--------------------|--|
| Description | MI-1851 is a potent furin inhibitor. MI-1851 prevents the proteolytic processing of the S protein of SARS-CoV-2 by endogenous flavoprotease in HEK293 cells. MI-185 has antiviral activity ^{[1][2]} . |
| In Vitro | MI-1851 (0-100 μM, 2h, 24 h) does not affect PHH cells viability, and extracellular hydrogen peroxide production even at 100 μM but reduces CYP3A4 isoenzyme activity in PHH cells in a dose-dependent manner ^[1] . MI-1851 (10-50 μM, 72 h) strongly inhibits the spread of SARS-CoV-2 and its proliferation in Calu-3 cells even at a low dose of 10 μM, which reduces the virus titer by 30 to 190-fold ^[2] . MI-1851 (compound 8) (0.5-16 μM, 48 h) inhibits DENV-2 and WNV replication with the EC ₅₀ values of 1.50 μM and 1.46 μM, respectively in huh-7 cells ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

- [1]. Erzsébet Pászti-Gere, et al. In vitro characterization of the furin inhibitor MI-1851: Albumin binding, interaction with cytochrome P450 enzymes and cytotoxicity. *Biomed Pharmacother.* 2022 Jul;151:113124.
- [2]. Dorothea Bestle, et al. TMPRSS2 and furin are both essential for proteolytic activation of SARS-CoV-2 in human airway cells. *Life Sci Alliance.* 2020 Jul 23;3(9):e202000786.
- [3]. Thuy Van Lam van, et al. The Basicity Makes the Difference: Improved Canavanine-Derived Inhibitors of the Proprotein Convertase Furin. *ACS Med Chem Lett.* 2021 Feb 9;12(3):426-432.

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

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