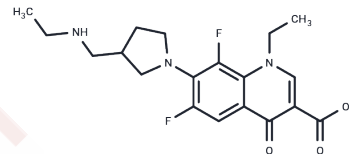


## Merafloxacin

## Chemical Properties

CAS No. :	91188-00-0
Formula:	C <sub>19</sub> H <sub>23</sub> F <sub>2</sub> N <sub>3</sub> O <sub>3</sub>
Molecular Weight:	379.4
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	Merafloxacin (CI 934) is a fluoroquinolone antibacterial, which was also identified as a 1 PRF inhibitor of SARS-CoV-2.
Targets(IC50)	SARS-CoV
In vitro	Frameshift inhibition by merafloxacin is robust to mutations within the pseudoknot region and is similarly effective on -1 PRF of other beta coronaviruses. Importantly, frameshift inhibition by merafloxacin substantially impedes SARS-CoV-2 replication in Vero E6 cells, thereby providing the proof of principle of targeting -1 PRF as an effective antiviral strategy for SARS-CoV-2.

## Solubility Information

Solubility	H <sub>2</sub> O: Insoluble, DMSO: 10 mg/mL (26.36 mM),, when pH is adjusted to 3 with HCl. 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	2.6357 mL	13.1787 mL	26.3574 mL
5 mM	0.5271 mL	2.6357 mL	5.2715 mL
10 mM	0.2636 mL	1.3179 mL	2.6357 mL
50 mM	0.0527 mL	0.2636 mL	0.5271 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

Sun Y , Abriola L , Surovtseva Y V , et al. Restriction of SARS-CoV-2 Replication by Targeting Programmed 1 Ribosomal Frameshifting In Vitro[J]. bioRxiv : the preprint server for biology:2020.10.21.349225.

Yin J, Jia P, Qu X, et al. Discovery of Voreloxin as a Dual-Selective Stabilizer for c-Myc/Bcl-2 G-Quadruplexes in Leukemia. Chemical Biology & Drug Design. 2024, 104(6): e70034.

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