

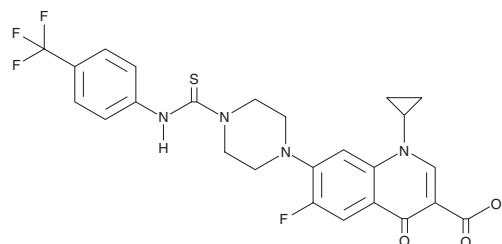
# PRODUCT INFORMATION



## IMP-1700

Item No. 33724

**CAS Registry No.:** 1458674-25-3  
**Formal Name:** 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-[4-[thio[[4-(trifluoromethyl)phenyl]amino]methyl]-1-piperazinyl]-3-quinolinecarboxylic acid  
**MF:** C<sub>25</sub>H<sub>22</sub>F<sub>4</sub>N<sub>4</sub>O<sub>3</sub>S  
**FW:** 534.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 283 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

IMP-1700 is supplied as a crystalline solid. A stock solution may be made by dissolving the IMP-1700 in the solvent of choice, which should be purged with an inert gas. IMP-1700 is slightly soluble in DMSO and dimethyl formamide.

### Description

IMP-1700 is an inhibitor of bacterial DNA repair.<sup>1</sup> It potentiates the activity of the quinolone antibiotic ciprofloxacin (Item No. 14286) against methicillin-resistant *S. aureus* (MRSA) with a combination index value of 0.7. IMP-1700 inhibits the ciprofloxacin-induced bacterial SOS response, a process that repairs DNA damage, in a reporter assay in a concentration-dependent manner. It is also active against *E. coli*, as well as methicillin-resistant and -sensitive *S. aureus*, when used alone (EC<sub>50</sub>s = 0.5, 0.21, and 3.8 μM, respectively).

### Reference

1. Lim, C.S.Q., Ha, K.P., Clarke, R.S., *et al.* Identification of a potent small-molecule inhibitor of bacterial DNA repair that potentiates quinolone antibiotic activity in methicillin-resistant *Staphylococcus aureus*. *Bioorg. Med. Chem.* **27**(20), 114962 (2019).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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