

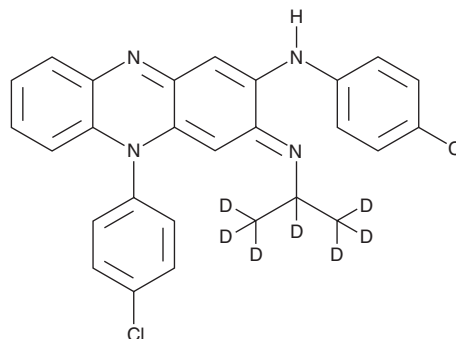
# PRODUCT INFORMATION



## Clofazimine-d<sub>7</sub>

Item No. 28535

**Formal Name:** (E)-N,5-bis(4-chlorophenyl)-3-((propan-2-yl-d<sub>7</sub>)imino)-3,5-dihydrophenazin-2-amine  
**MF:** C<sub>27</sub>H<sub>15</sub>Cl<sub>2</sub>D<sub>7</sub>N<sub>4</sub>  
**FW:** 480.4  
**Chemical Purity:** ≥95% (Clofazimine)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>7</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Clofazimine-d<sub>7</sub> is intended for use as an internal standard for the quantification of clofazimine (Item No. 23301) by GeC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Clofazimine-d<sub>7</sub> is supplied as a solid. A stock solution may be made by dissolving the clofazimine-d<sub>7</sub> in the solvent of choice, which should be purged with an inert gas. Clofazimine-d<sub>7</sub> is slightly soluble in DMSO and methanol (warmed).

### Description

Clofazimine is an antimycobacterial compound with MICs ranging from 0.03 to 0.12 µg/ml against clinical isolates of *M. paratuberculosis*.<sup>1</sup> It also has activity against 80 isolates of *M. fortuitum*, *M. chelonae*, and *M. fallax* (MICs = ≤0.25-8 µg/ml).<sup>2</sup> Clofazimine (25 mg/kg per day) reduces the number of *M. tuberculosis*-infected cells in the spleen and lungs of mice infected with the multidrug-resistant clinical isolate strain CNL.<sup>3</sup> Formulations containing clofazimine have been used for the treatment of leprosy and drug-resistant tuberculosis.

### References

1. Chiodini, R.J. Bactericidal activities of various antimicrobial agents against human and animal isolates of *Mycobacterium paratuberculosis*. *Antimicrob. Agents Chemother.* **34**(2), 366-367 (1990).
2. Ausina, V., Condom, M.J., Mirelis, B., *et al.* *In vitro* activity of clofazimine against rapidly growing nonchromogenic mycobacteria. *Antimicrob. Agents Chemother.* **29**(5), 951-952 (1986).
3. Klemens, S.P., DeStefano, M.S., and Cynamon, M.H. Therapy of multidrug-resistant tuberculosis: Lessons from studies with mice. *Antimicrob. Agents Chemother.* **37**(11), 2344-2347 (1993).

#### 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.

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