

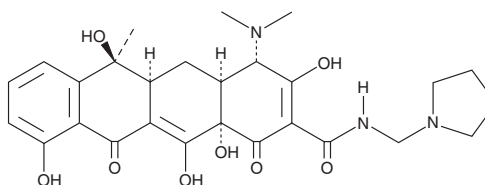
# PRODUCT INFORMATION



## Rolitetracycline

Item No. 23479

**CAS Registry No.:** 751-97-3  
**Formal Name:** (4S,4aS,5aS,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-N-(1-pyrrolidinylmethyl)-2-naphthacenecarboxamide  
**Synonyms:** Pyrrolidinylmethyltetracycline, SQ 15,659  
**MF:** C<sub>27</sub>H<sub>33</sub>N<sub>3</sub>O<sub>8</sub>  
**FW:** 527.6  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 219, 267, 365 nm  
**Supplied as:** A 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

Rolitetracycline is supplied as a solid. A stock solution may be made by dissolving the rolitetracycline in water. We do not recommend storing the aqueous solution for more than one day.

### Description

Rolitetracycline is a tetracycline antibiotic with bacteriostatic activity at low concentrations (7.8 µg/ml) and bactericidal activity at high concentrations (15.6 µg/ml) against *E. coli*.<sup>1</sup> It has additive and synergistic effects with penicillin and cephalothin, respectively, *in vitro* against 34 *E. coli* and *S. aureus* strains. Rolitetracycline is also active against *P. falciparum* strains (IC<sub>50</sub>s = 45-208 µM) that are susceptible and resistant to chloroquine (Item No. 14194).<sup>2</sup> It also reduces amyloid-β (1-40) (Aβ40) fibrilization (IC<sub>50</sub> = 59 µM in an immune assay) and completely inhibits Aβ40-induced cellular toxicity at a concentration of 20 µM.<sup>3</sup>

### References

1. Dashner, F.D. Combination of bacteriostatic and bactericidal drugs: Lack of significant *in vitro* antagonism between penicillin, cephalothin, and rolitetracycline. *Antimicrob. Agents Chemother.* **10(5)**, 802-808 (1976).
2. Oradines, B., Rogier, C., Fusai, T., *et al.* *In vitro* activities of antibiotics against *Plasmodium falciparum* are inhibited by iron. *Antimicrob. Agents Chemother.* **45(6)**, 1746-1750 (2001).
3. Howlett, D.R., George, A.R., Owen, D.E., *et al.* Common structural features determine the effectiveness of carvedilol, daunomycin and rolitetracycline as inhibitors of Alzheimer β-amyloid fibril formation. *Biochem J.* **343(Pt 2)**, 419-423 (1999).

#### 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

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