

# PRODUCT INFORMATION

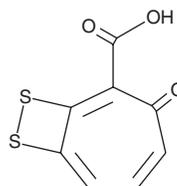


## Tropodithietic Acid

Item No. 23244

**CAS Registry No.:** 750590-18-2  
**Formal Name:** 3-oxo-8,9-dithiabicyclo[5.2.0]nona-1,4,6-triene-2-carboxylic acid

**Synonym:** TDA  
**MF:** C<sub>8</sub>H<sub>4</sub>O<sub>3</sub>S<sub>2</sub>  
**FW:** 212.2  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



**Special Conditions:** Protect from moisture and direct light

**Item Origin:** Bacterium/*Roseobacter gallaeciensis*

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

### Laboratory Procedures

Tropodithietic acid (TDA) is supplied as a solid. A stock solution may be made by dissolving the TDA in the solvent of choice, which should be purged with an inert gas. TDA is soluble in the organic solvent DMSO.

### Description

TDA is a broad-spectrum antibiotic produced by the marine bacterium *R. gallaeciensis*.<sup>1</sup> It is active against a variety of Gram-negative  $\alpha$ -proteobacteria,  $\gamma$ -proteobacteria, and flavobacteria as well as Gram-positive actinobacteria strains in a disc assay. TDA also inhibits the growth of *S. aureus* and *V. anguillarum* with MIC values of 39 and 19  $\mu$ M, respectively.<sup>2</sup>

### References

1. Brinkhoff, T., Bach, G., Heidorn, T., *et al.* Antibiotic production by a Roseobacter clade-affiliated species from the German Wadden Sea and its antagonistic effects on indigenous isolates. *Appl. Environ. Microbiol.* **70**(4), 2560-2565 (2004).
2. Rabe, P., Klapschinski, T.A., Brock, N.L., *et al.* Synthesis and bioactivity of analogues of the marine antibiotic tropodithietic acid. *Beilstein J. Org. Chem.* **10**, 1796-1801 (2014).

#### 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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