

# PRODUCT INFORMATION



## Mensacarcin

Item No. 31438

**CAS Registry No.:** 808750-39-2  
**Formal Name:** (1R,2S,3S,4S,4aS,9aS,10S)-1,2,3,4-tetrahydro-1,3,4-trihydroxy-5,10-dimethoxy-2-methyl-3-[[[(2R,3S)-3-methyl-2-oxiranyl]carbonyl]-4a,9a-epoxyanthracen-9(10)-one

**MF:** C<sub>21</sub>H<sub>24</sub>O<sub>9</sub>

**FW:** 420.4

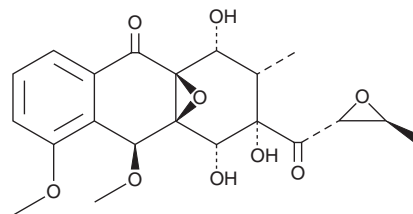
**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Bacterium/*Streptomyces bottropensis*



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

### Laboratory Procedures

Mensacarcin is supplied as a solid. A stock solution may be made by dissolving the mensacarcin in the solvent of choice, which should be purged with an inert gas. Mensacarcin is soluble in methanol and DMSO.

### Description

Mensacarcin is a bacterial metabolite that has been found in *S. bottropensis* and has anticancer activity.<sup>1,2</sup> It is cytostatic in the NCI-60 panel of cancer cell lines (mean IC<sub>50</sub> = 1.3 μM) and cytotoxic to HepG2, HM02, KATO III, and MCF-7 cells (IC<sub>50</sub>s = 0.4-50 μM).<sup>1</sup> Mensacarcin induces apoptosis in SK-MEL-28 and SK-MEL-5 melanoma cells.<sup>2</sup>

### References

1. Maier, S., Pflüger, T., Loesgen, S., *et al.* Insights into the bioactivity of mensacarcin and epoxide formation by MsnO8. *Chembiochem* **15**(5), 749-756 (2014).
2. Plitzko, B., Kaweesa, E.N., and Loesgen, S. The natural product mensacarcin induces mitochondrial toxicity and apoptosis in melanoma cells. *J. Biol. Chem.* **292**(51), 21102-21116 (2017).

#### 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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