

# PRODUCT INFORMATION



## Siccanin

Item No. 23654

**CAS Registry No.:** 22733-60-4  
**Formal Name:** (4a*S*,6a*S*,11b*R*,13a*S*,13b*S*)-  
2,3,4,4a,5,6,6a,13b-octahydro-4,4,6a,9-  
tetramethyl-1*H*,11b*H*,13*H*-benzo[*a*]  
furo[2,3,4-*mn*]xanthen-11-ol

**Synonyms:** NSC 135048, (-)-Siccanin

**MF:** C<sub>22</sub>H<sub>30</sub>O<sub>3</sub>

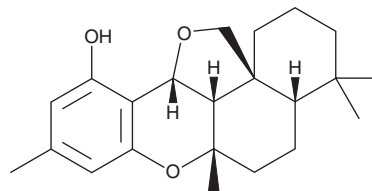
**FW:** 342.5

**Purity:** ≥98%

**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

Siccanin is supplied as a solid. A stock solution may be made by dissolving the siccanin in the solvent of choice, which should be purged with an inert gas. Siccanin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

### Description

Siccanin is an inhibitor of mitochondrial complex II (succinate dehydrogenase; IC<sub>50</sub>s = 0.87 and 9.3 μM for *P. aeruginosa* and rat mitochondria, respectively).<sup>1</sup> It inhibits the growth of *T. mentagrophytes* (IC<sub>50</sub> = 0.3 μg/ml) via inhibition of succinate oxidation in the mitochondria.<sup>2</sup> It also inhibits the growth of *C. albicans* strains with IC<sub>50</sub> values ranging from 5-40 and 80-90 μg/ml for aerobic and anaerobic conditions, respectively.<sup>3</sup>

### References

1. Mogi, T., Kawakami, T., Arai, H., *et al.* Siccanin rediscovered as a species-selective succinate dehydrogenase inhibitor. *J. Biochem.* **146**(3), 383-387 (2009).
2. Nose, K. and Endo, A. Mode of action of the antibiotic siccanin on intact cells and mitochondria of *Trichophyton mentagrophytes*. *J. Bacteriol.* **105**(1), 176-184 (1971).
3. Matsuki, M., Kanatsu, H., Watanabe, T., *et al.* Effects of antifungal drugs on proliferation signals in *Candida albicans*. *Biol. Pharm. Bull.* **29**(5), 919-922 (2006).

#### 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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