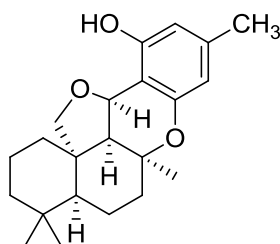


Siccanin

Code No.: **BIA-S1421**

Pack sizes: **1 mg, 5 mg**



Synonyms : CS 280, SI 23548

Specifications

CAS #	: 22733-60-4
Molecular Formula	: C ₂₂ H ₃₀ O ₃
Molecular Weight	: 342.5
Source	: <i>Streptomyces</i> sp.
Appearance	: White solid
Purity	: >98% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Siccanin is an unusual fused phenolic pentacycle first isolated from *Helminthosporium siccans* and reported in 1962 as a potent antifungal agent. Siccanin inhibits succinate dehydrogenase in the terminal electron transport system. More recent studies note the proximity of the siccanin binding site to the quinone-binding site of the enzyme. Species-selective inhibition by siccanin is unique among succinate dehydrogenase inhibitors and offers a lead for new chemotherapeutics.

References

1. Studies on antibiotics from *Helminthosporium* sp. fungi. VII Siccanin, a new antifungal antibiotic produced by *Helminthosporium siccans*. Ishibashi K. J. Antibiot. Series A 1962, 15, 161.
2. Mode of action of the antibiotic siccanin on intact cells and mitochondria of *Trichophyton mentagrophytes*. Nose K. & Endo A. J. Bacteriol. 1971, 105, 176.
3. Siccanin rediscovered as a species-selective succinate dehydrogenase inhibitor. Mogi T.J. et al. Biochem. 2009, 146, 383.

Updated: 2 December 2014