

Siccanin

PRODUCT DATA SHEET

Code No.: BIA-S1421

Pack sizes.: 1mg, 5mg

Synonyms: CS 280, SI 23548

Specifications

Molecular Formula

CAS # : 22733-60-4

: C22H30O3

Molecular Weight : 342.5

Source :-

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 Helminthopsporium 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.