

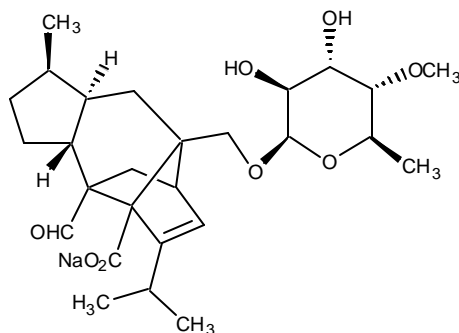
Product Information

Sordarin sodium salt from *Sordaria araneosa*

Catalog Number **S 1442**Storage Temperature: $-20\text{ }^{\circ}\text{C}$

CAS RN: 463356-00-5

11076-17-8 (free acid)

Empirical Formula: $\text{C}_{27}\text{H}_{39}\text{NaO}_8$

Molecular Weight: 514.58

Sordarin is an antifungal metabolite possessing a tetracyclic diterpene glycoside structure.¹ It is a highly potent inhibitor of eukaryotic protein synthesis with selectivity for the fungal translation machinery.² Remarkably, sordarin has no effect on other eukaryotic protein synthesis systems.^{2,3}

The elongation factor eEF-2 is the molecular target for sordarin.¹ It blocks ribosomal translocation by stabilizing the EF2-ribosome complex in a manner similar to that of fusidic acid in the bacterial system.² Additional cellular components, including rpP0, an essential protein of the ribosomal large subunit stalk, are involved in its mechanism of action.³

Sordarin was shown to inhibit *in vitro* translation in the pathogenic fungi *C. albicans*, *C. glabrata*, and *C. neoformans*.⁴ In addition to its therapeutic potential, sordarin is a useful tool for the analysis of protein translation events.^{5,6}

Reagent

Supplied as a solid. Purity: $\geq 98\%$ by HPLC

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Soluble in water up to 10 mg/mL.

Storage/Stability

The product is stable for 2 years when stored desiccated at $-20\text{ }^{\circ}\text{C}$. Aqueous solutions are stable at $-20\text{ }^{\circ}\text{C}$ for at least 6 months, as determined by HPLC.

References

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3. Gomez-Lorenzo, M.G., and Garcia-Bustos, J.F., Ribosomal P-protein stalk function is targeted by sordarin antifungals. *J. Biol. Chem.*, **273**, 25041-25044 (1998).
4. Dominguez, J.M., et al., Sordarins: A new class of antifungals with selective inhibition of the protein synthesis elongation cycle in yeasts. *Antimicrob. Agents Chemother.*, **42**, 2274-2278 (1998).
5. Andersen, G. R. et al., Elongation factors in protein biosynthesis. *Trends Biochem. Sci.* **28**, 434-441 (2003).
6. Spahn, C.M., et al., Domain movements of elongation factor eEF2 and the eukaryotic 80S ribosome facilitate tRNA translocation. *EMBO J.*, **23**, 1008-1019 (2004).

ES,KAA,PHC 11/05-1

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