

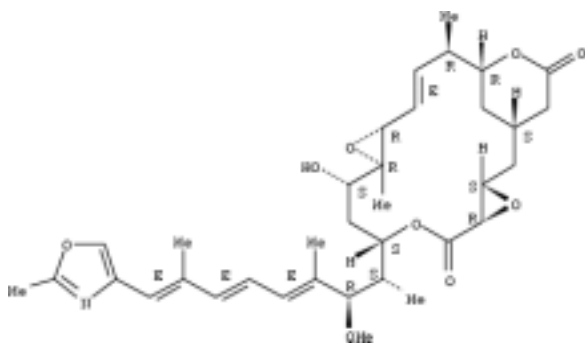
Product Information

RHIZOXIN

Product Number **R 8149**Storage Temperature $-0\text{ }^{\circ}\text{C}$

CAS #: 90996-54-6

Product Description



Molecular Weight: 625.3

Molecular formula: $\text{C}_{35}\text{H}_{47}\text{NO}_9$

Purity: minimum 95% (HPLC)

Rhizoxin, an antitumor agent, is a 16-membered ring lactone having an oxazole ring in its structure. This macrolide inhibits microtubule assembly and also depolymerizes microtubules. Rhizoxin binds to β -tubulin in most eucaryotic cells including animals, plants, and fungi. It completely prevents formation of an intrachain cross-link in β -tubulin by N,N'-ethylenebis (iodoacetamide).

Due to its antimitotic activity, Rhizoxin, is used as an antitumor agent (e.g. in human cancer cell lines).

Preparation Instructions

Soluble in DMSO or ethanol at 1 mg/ml (stable for 3 weeks at 2-8 $^{\circ}\text{C}$). DMSO solutions may be stored frozen for 2 months.

Storage/Stability

It is recommended to store the product at $-0\text{ }^{\circ}\text{C}$. The unopened product is stable for at least 3 years.

References

1. Tsuru, T., et al., Rhizoxin, a macrocyclic lactone antibiotic, as a new antitumor agent against human and murine tumor cells and their vincristine-resistant sublines. *Cancer Res.*, **46**, 381-385 (1986).
2. Ikubo, S., et al., In vitro evaluation of antimicrotubule agents in human small-cell lung cancer cell lines. *Anticancer Res.*, **19**, 3985-3988 (1999).
3. Sawada, T., et al., Identification of the fragment photoaffinity-labeled with azidodansyl-rhizoxin as Met-363-Lys-379 on beta-tubulin. *Biochem Pharmacol.*, **45**, 1387-1394 (1993).
4. Plobidou, A., et al., Evidence for novel cell cycle checkpoints in trypanosomes: kinetoplast segregation and cytokinesis in the absence of mitosis. *J. Cell Sci.*, **112**, 4641-4650 (1999).

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