

Product Information

REBECCAMYCIN

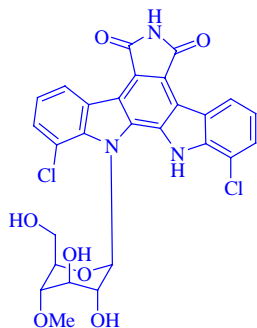
Product Number **R 4900**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

Protect from light

CAS #: 93908-02-2

Product Description



Appearance: Yellow solid

Molecular Formula: $\text{C}_{27}\text{H}_{21}\text{Cl}_2\text{N}_3\text{O}_7$

Formula Weight: 570.4

Purity by HPLC: $\geq 98\%$

From: *Saccharothrix aerocolonigenes*

Rebeccamycin is an antibiotic composed of a halogenated indolocarbazole chromophore linked via N-glycosidic bond to a glucose derivative. As an antitumor agent,¹ it is cytotoxic to tumor cell lines such

as human lung adenocarcinoma, colon carcinoma and nasopharyngeal carcinoma, etc.^{2,3,4} Rebeccamycin intercalates into DNA and is an inhibitor of topoisomerase I.⁵ It stabilizes the covalent topoisomerase I-DNA intermediate (the cleavable complex) resulting in increase DNA strand breaks.⁶

Preparation Instructions

Rebeccamycin is soluble in dimethyl sulfoxide (DMSO) to at least 3 mg/ml⁵ or in tetrahydrofuran (THF). Solubility in methanol is less than 0.2 mg/ml.

Storage/Stability

Store frozen at $-20\text{ }^{\circ}\text{C}$. **Protect from light.** Solutions in methanol are stable at least 6 months at $-20\text{ }^{\circ}\text{C}$.

References

1. Bush J.A., et al., J. Antibiot., **40**, 668 (1987).
2. Weitman, S., et al., J. Pediatr. Hematol. Oncol., **20**, 136 (1998).
3. Anizon, F., et al., Bioorg. Med. Chem., **6**, 1597 (1998).
4. Goossens, J.F., et al., Eur. J. Pharmacol., **389**, 141 (2000).
5. Bailly, C, et al., Mol. Pharmacol., **53**, 77-87 (1998).
6. Moreau, P., et al., J. Med. Chem., **42**, 584 (1999).

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