

#### PRODUCT DATA SHEET

Code No.: BIA-R1075

Pack sizes.: 0.5mg, 2.5mg

# Rebeccamycin

Synonyms:

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# **Specifications**

CAS # : 93908-02-2

Molecular Formula : C27H21Cl2N3O7

Molecular Weight : 570.4

Source :-

Appearance : Dull yellow lyophilisate

Purity : >99% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol.

Poor water solubility.

# **Application Notes**

Rebeccamycin is an indolocarbazole isolated from Lechevalieria aerocolonigenes. Rebeccamycin displays selective antitumor activity against several cell lines. Rebeccamycin's primary mechanism of action is via strong DNA

intercalation resulting in the potent catalytic inhibition of both topoisomerases I and II. Analogues of rebeccamycin have been tested in clinical trials for cancer therapy.

### References

- 1. Discovery of antitumor indolocarbazoles: rebeccamycin, NSC 655649, and fluoroindolocarbazoles. Long B. H., et al., Curr. Med. Chem. Anticancer Agents, 2002, 2, 255.
- 2. Active site mutations in DNA topoisomerase I distinguish the cytotoxic activities of camptothecin and the indolocarbazole, rebeccamycin. Woo M. H., et al., J. Biol. Chem., 2002, 277, 3813.
- 3. Production and biological activity of rebeccamycin, a novel antitumor agent. Bush J. A., et al., J. Antibiot., 1987, 40, 668.