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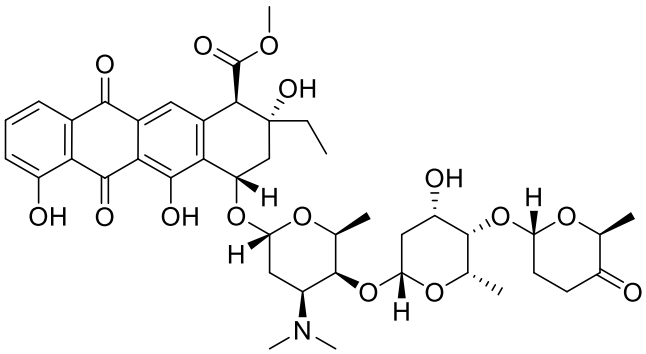
PRODUCT DATA SHEET

Aclarubicin

Code No.: **BIA-A2469**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : Aclacinomycin A, Aclacur, Antibiotic 3082A, Antibiotic 77-3082A, Antibiotic MA 144A1, Jaclacin, NSC 208734

Specifications

CAS #	:	**57576-44-0**
Molecular Formula	:	**$C_{42}H_{53}NO_{15}$**
Molecular Weight	:	**811.9**
Source	:	***Streptomyces* sp.**
Appearance	:	**Red solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Aclarubicin (aclacinomycin A) is an anthracycline and topoisomerase II inhibitor that has been clinically tested against haematologic and solid tumors. Aclarubicin stabilizes topoisomerase I cleavage. Aclarubicin accumulates efficiently in the mitochondria of living human cells and leads to mitochondrial dysfunction. Aclarubicin inhibits reverse transcriptase, endothelin converting enzyme and collagenase, and is active against HIV.

References

1. Antitumor activity of new anthracycline antibiotics, aclacinomycin-A and its analogs, and their toxicity. Hori S. et al. Gan 1977, 68, 685.
2. Novel actions of inhibitors of DNA topoisomerase II in drug-resistant tumor cells. Beck W.T. et al. Cancer Chemother Pharmacol. 1994, 34 Suppl:S14-8.
3. Aclarubicin, an anthracycline anti-cancer drug, fluorescently contrasts mitochondria and reduces the oxygen consumption rate in living human cells. Iihoshi H. et al. Toxicol. Lett. 2017, 277, 109.

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