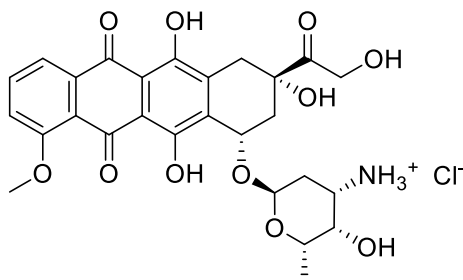


## Epirubicin hydrochloride

Code No.: **BIA-E2320**

Pack sizes: **1 mg, 5 mg**



Synonyms : 4'-Epiadriamycin, 4'-Epidoxorubicin, 4'-*epi*-Adriamycin, 4'-*epi*-Doxorubicin, IMI 28, NSC 256942

## Specifications

CAS #	: <b>56420-45-2</b>
Molecular Formula	: <b>C<sub>27</sub>H<sub>29</sub>NO<sub>11</sub>.HCl</b>
Molecular Weight	: <b>580</b>
Source	: <b>Semi-synthetic</b>
Appearance	: <b>Red solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in methanol or DMSO</b>

## Application Notes

Epirubicin is the 4'-*epi*-isomer of the antitumor agent, doxorubicin. Epirubicin acts by inhibiting topoisomerase II resulting in DNA double strand breaks. The anthracyclines also act by evicing histone from open chromatin, deregulating the transcriptome in cancer cells and organs. Epirubicin is active against a wide spectrum of experimental tumours including L1210 and P388 leukemias, sarcomas SA180 (solid and ascitic forms), B16 melanoma, mammary carcinoma, Lewis lung carcinoma and colon carcinoma 38.

## References

1. Targeting DNA topoisomerase II in cancer chemotherapy. Nitiss J.L. Nat. Rev. Cancer 2009, 9, 338.
2. Drug-induced histone eviction from open chromatin contributes to the chemotherapeutic effects of doxorubicin. Pang B. et al. Nature Comm. 2013, DOI:10.1038/ncomms 2921.
3. The effectiveness of the anthracycline analog 4'-epidoxorubicin in the treatment of experimental tumors: a review. Goldin A. et al. Invest New Drugs 1985, 3, 3.