

Daunorubicin hydrochloride

Catalogue Number : 2355061

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Dauno Rubidomycine, Cerubidine, Daunoblastine, Daunorubicin, Rubidomycin, NSC 82151

Chemical Name: (7S,9S)-9-acetyl-7-[(2R,4S,5S,6S)-4-amino-5-hydroxy-6-methyloxan-2-yl]oxy-6,9,11-trihydroxy-4-methoxy-8,10-dihydro-7H-tetracene-5,12-dione;hydrochloride

Molecular Formula: C₂₇H₂₉NO₁₀

Molecular Weight: 564.0

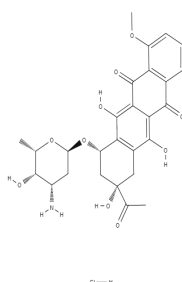
CAS Number: 23541-50-6

Purity: 98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Daunorubicin hydrochloride is a RNA and DNA synthesis inhibitor that functions in part by blocking the function of topoisomerase II. It is reported to induce apoptosis in acute myeloid leukemia (AML) cells. It is currently being researched as a potential treatment for COVID-19.

Preparation & Storage

Soluble in organic solvents such as ethanol and DMSO. It is soluble in DMSO up to 10mg/ml.

References

1. Jaffrezou, J. P., Levade, T., Bettaieb, A., Andrieu, N., Bezombes, C., Maestre, N., ... Laurent, G. (1996). Daunorubicin-induced apoptosis: triggering of ceramide generation through sphingomyelin hydrolysis. *The EMBO journal*, 15(10), 2417-2424.
2. Slater, L. M., Murray, S. L., Wetzell, M. W., Wisdom, R. M., Duvall, E. M. (1982). Verapamil restoration of daunorubicin responsiveness in daunorubicin-resistant Ehrlich ascites carcinoma. *The Journal of clinical investigation*, 70(5), 1131-1134.
3. Farag, A., Wang, P., Ahmed, M., Sadek, H. (2020). Identification of FDA Approved Drugs Targeting COVID-19 Virus by Structure-Based Drug Repositioning.