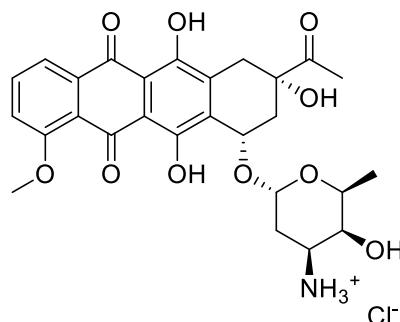


Daunorubicin hydrochloride

Code No.: **BIA-D2311**

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



Synonyms : Cerubidine, Daunoblastin, Daunomycin chlorohydrate, NDC 0082-4155, Ondena, RP 13057 hydrochloride, Rubidomycin hydrochloride

Specifications

CAS #	: 23541-50-6
Molecular Formula	: C₂₇H₂₉NO₁₀.HCl
Molecular Weight	: 563.98
Source	: Semi-synthetic
Appearance	: Red solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Daunorubicin HCl (daunomycin HCl), an anthracycline antibiotic with potent antitumor activity, was first isolated from *S. peucetius* by scientists from Farmitalia. The mechanism of action of daunomycin is complex and incompletely understood. Daunomycin binds reversibly to double stranded DNA with (G.C) base specificity leading to inhibition of transcription. Daunomycin activates signalling pathways, including a sphingomyelinase-initiated sphingomyelin-ceramide pathway, mitogen-activated kinase and stress-activated protein/c-Jun N-terminal kinase activation, transcription factors such as nuclear factor kappa B, as well as the Fas/Fas-ligand system.

References

1. 'Daunomycin', a new antibiotic of the rhodomycin group. Di Marco A. et al. Nature 1964, 201, 706.
2. Intercalative drug binding to DNA. Wang A.H-J. Curr Opin Struct Biol. 1992,2, 361.
3. Signaling pathways activated by daunorubicin. Laurent G. and Jaffrézou J.P. Blood 2001, 98, 913.