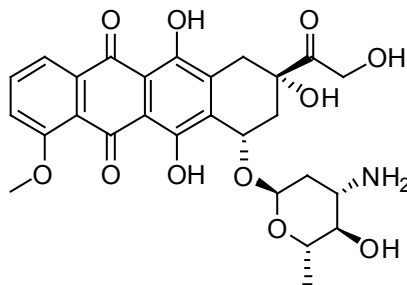


## Adriamycin

Code: **BIA-A1229**

Pack sizes: **25 mg, 100 mg**



Synonyms : **Doxorubicin, 14-Hydroxydaunomycin, Adriacin, Adriblastin, Caelyx, Dox, Doxil, Farmiblastina, FI 106, K 1039, KW 125, NSC 123127**

## Specifications

CAS # : **23214-92-8**  
Molecular Formula : **C<sub>27</sub>H<sub>29</sub>NO<sub>11</sub>**  
Molecular Weight : **543.5**  
Source : ***Streptomyces peucetius* MST-AS5775**  
Appearance : **Orange red solid**  
Purity : **> 99%**  
Long Term Storage : **- 20°C**  
Solubility : **Soluble in water, methanol, DMSO, DMF with moderate ethanol solubility.**

## Application Notes

Adriamycin is the most extensively studied of a family of highly fluorescent anthracycline antibiotics produced by several *Streptomyces* species, first reported in 1967 and later approved for human therapeutic use as an antitumor agent for the treatment of a wide range of cancers. Adriamycin has also been reported to exhibit anti-HIV and antibacterial activity. The mode of action of adriamycin is thought to be due to intercalation of DNA and inhibition of nucleic acid synthesis.

## References

1. Adriamycin (14-hydroxydaunomycin), a novel antitumor antibiotic. Arcamone F. et al., Tet. Letters 1969, 13, 1007.
2. Interference by doxorubicin with DNA unwinding in MCF-7 breast tumor cells. Fornari F.L. et al., Mol. Pharmacology 1994, 45, 649.
3. Effect of Adriamycin on DNA, RNA, and protein synthesis in cell-free systems and intact cells. Momarier R. et al., Cancer Research 1976, 36, 2891.