

Product Information

Doxorubicin, Ready-Made

2 mg/mL Suitable for cell culture

D5220

Product Description

Doxorubicin (DOX) is an anthracycline antibiotic isolated from *Streptomyces peucetius* var. *caesius*. A hydroxy derivative of daunorubicin, DOX is naturally fluorescent anthracycline antibiotic and an anticancer drug.

This readymade solution contains doxorubicin hydrochloride at a concentration of 2 mg/mL in DMSO.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store this product at -20 °C. At the indicated temperature, the product is stable for at least 2 years.

Activity

Doxorubicin inhibits topoisomerase II¹ by intercalating between base pairs and by inducing strand breaks, resulting in the inhibition of nucleic acid and protein synthesis. It also contributes to the formation of free radicals for the disruption of membrane lipids and DNA strands. It is used in the treatment of non-Hodgkin's lymphoma and other cancers. DOX is a substrate of MRP1; used for measurement of drug efflux pump activities and for identification of MRP1 inhibitors².

References

1. Int J Mol Sci. 2018 19(11): 3480. doi: 10.3390/ijms19113480.
2. Biomed Pharmacother. 2019 **118**:109289. doi: 10.1016/j.biopha.2019.109289.

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