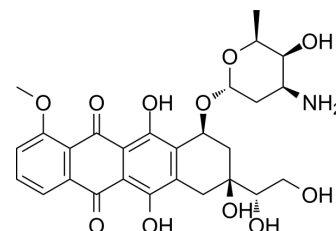


Doxorubicinol

Cat. No.:	HY-121259
CAS No.:	54193-28-1
Molecular Formula:	C ₂₇ H ₃₁ NO ₁₁
Molecular Weight:	545.54
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Doxorubicinol, a potent inhibitor of the cardiac sarcoplasmic reticulum calcium pump, inhibits systolic myocardial function in isolated heart muscle. Doxorubicinol inhibits tumor cell growth and has cardiotoxicity.
In Vitro	<p>Doxorubicinol inhibits diastolic function (i.e., increased resting pressure) of isolated papillary muscles^[1].</p> <p>Doxorubicinol almost completely abrogates calcium pump activity at concentrations that significantly reduce diastolic function^[1].</p> <p>Doxorubicinol inhibits Ca²⁺-stimulated ATPase activity of the sarcoplasmic reticulum of skeletal muscle and abolishes Na⁺/K⁺-ATPase activity of the sarcolemma in canine and rabbit heart preparations^[1].</p> <p>Doxorubicinol inhibits the proliferation of PANC-1 cells with IC₅₀ value of 35.4 μM, PD PaCa cells with IC₅₀ value of 44.5 μM, WD PaCa cells with IC₅₀ value of 49.5^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Olson RD, et al. Doxorubicin cardiotoxicity may be caused by its metabolite, doxorubicinol. Proc Natl Acad Sci U S A. 1988 May;85(10):3585-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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