



Doxorubicin HCl

Data Sheet

Catalog Number: MC11076

Product Type: Small Molecule

Bio-Activity: DNA damaging agent

CAS #: 25316-40-9

Research Categories: Cell death, infectious disease, cancer

Solubility: Soluble in Water (up to 25 mg/ml).

Molecular Formula: C₂₇H₂₉NO₁₁ · HCl

Purity: > 98%

Molecular Weight: 580.0

Format: Powder

Ship Temp: Ambient

Storage: -20°C

Application Notes

Description/Data:

Antitumor antibiotic. Induces DNA damage by intercalation [1] and inhibition of topoisomerase 2. Induces apoptosis in a variety of cell lines [2]. Substrate for MDR1 [3]. Cell permeable.

References:

- 1) Zeman et al. (1998), Characterization of covalent adriamycin-DNA adducts; Proc. Natl. Acad. Sci., 95 11561
- 2) Katoh et al. (1998), Vascular endothelial growth factor inhibits apoptotic death in hematopoietic cells after exposure to chemotherapeutic drugs by inducing MCL1 acting as an antiapoptotic factor; Cancer Res., 58 5565
- 3) Perez et al. (2011), Anti-MDR-1 siRNA restores chemosensitivity in chemoresistant breast carcinoma and osteosarcoma cell lines; Anticancer Res., 31 2813

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012

www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com