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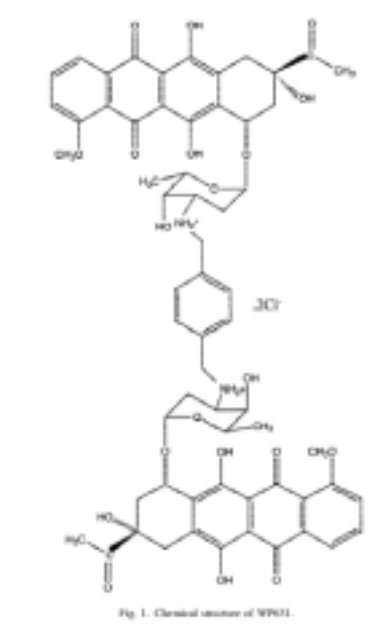
ProductInformation

WP631
Methanesulfonate salt

Product Number **W 3763**
Storage Temperature –20 °C



Product Description

Molecular Formula: $C_{62}H_{64}N_2O_{20}\bullet C_2H_8S_2O_6$
Molecular Weight: 1349 (anhydrous)

WP631 is a fluorescent bisintercalating anthracycline antibiotic shown to have activity against multidrug-resistant cancer cells.[1] Composed of two monomeric units of daunorubicin, symmetrically linked together via *p*-xylenyl 3-NH_2 sites, WP631 exhibits extremely high DNA binding affinity.[2] It is slightly less cytotoxic than daunorubicin in the sensitive cell lines.[1]
It inhibits basal transcription by RNA polymerase II. Concentrations of WP631 as low as 60 nM inhibit the Sp1-activated transcription initiation *in vitro*.[3] WP631 is approximately 15 times more efficient than daunorubicin at inhibiting transcription initiation from an adenovirus promoter containing an upstream Sp1-protein binding site.[4] Jurkat cells treated with nanomolar concentrations of WP631 undergo G_2/M cell cycle arrest, and transcription of c-myc and p53 genes is inhibited.[5]

Reagent

WP631 methanesulfonate is supplied as a dark red solid.

Purity: ≥ 97% (HPLC)

Precautions and Disclaimer

Consult the MSDS for information regarding hazardous and safe handling practices.

Preparation Instructions

The product is soluble in dimethyl sulfoxide (DMSO) at 5 mg/ml.

Storage/Stability

Store the product at –20 °C.

References

1. Chaires, J .B., et al., J. Med. Chem., **40**, 261-266 (1997).
2. Leng, F., et al., Biochemistry, **37**, 1743-1753 (1998).
3. Martín, B., et al., Nucl. Acids Res., **27**, 3402-3409 (1999).
4. Portugal, J., et al., Curr. Med. Chem., **8**, 1-8 (2001).
5. Villamarín, S., et al., Biochem. Pharm., **63**, 1251-1258 (2002).

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