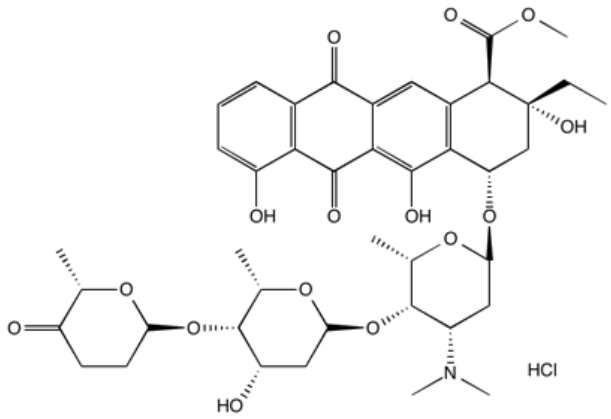
Catalog # 10-1099
Aclacinomycin A HCl
CAS# 75443-99-1
Aclarubicin hydrochloride
Lot # X102456



Specific inhibitor of the 20S proteasome chymotrypsin-like activity[1]. Inhibition of Brg1 proteasomal degradation by aclacinomycin A reverses (0.25 μM in ILU-18 cells) the removal of Brg1 from promoters of inflammatory genes elucidating the regulatory role of the proteasome in controlling the duration of the inflammatory process[2]. Induces the differentiation of K562 cells towards the erythroid pathway[3]. Induces apoptosis[4]. Cell permeable.

1) Figueiroda-Pereira *et al*. (1996), *The Antitumor Drug Aclacinomycin A, Which Inhibits the Degradation of Ubiquitinated Proteins, Shows Selectivity for the Chymotrypsin-like Activity of the Bovine Pituitary 20S Proteasome ;* J. Biol. Chem., **271** 16455
2) Cullen *et al* (2009), *Catalytic activity of the proteasome fine-tunes Brg1-mediated chromatin remodeling to regulate the expression of inflammatory genes*; Mol. Immunol., **47** 600
3) Morceau *et al.* (2006), *Tumor necrosis factor alpha inhibits aclacinomycin A-induced erythroid differentiation of K562 cells via GATA-1*; Cancer Lett.. **240** 203
4) Mayer et al. (1994), *Culture conditions modulate the effects of alacinomycin A on growth, differentiation and apoptosis of HL60 cells*; Anticancer Res., **14** 2331

PHYSICAL DATA

Molecular Weight:	848.33
Molecular Formula:	$C_{42}H_{53}NO_{15}$ HCl
Purity:	90% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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