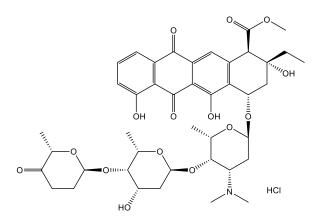


## Catalog # 10-1099 Aclacinomycin A HCI CAS# 75443-99-1

Aclarubicin hydrochloride Lot # X102457



Specific inhibitor of the 20S proteasome chymotrypsin-like activity<sup>1</sup>. Inhibition of Brg1 proteasomal degradation by aclacinomycin A reverses (0.25  $\mu$ M 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<sup>2</sup>. Induces the differentiation of K562 cells towards the erythroid pathway<sup>3</sup>. Induces apoptosis<sup>4</sup>. 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 <sub>42</sub> H <sub>53</sub> NO <sub>15</sub> HCI
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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