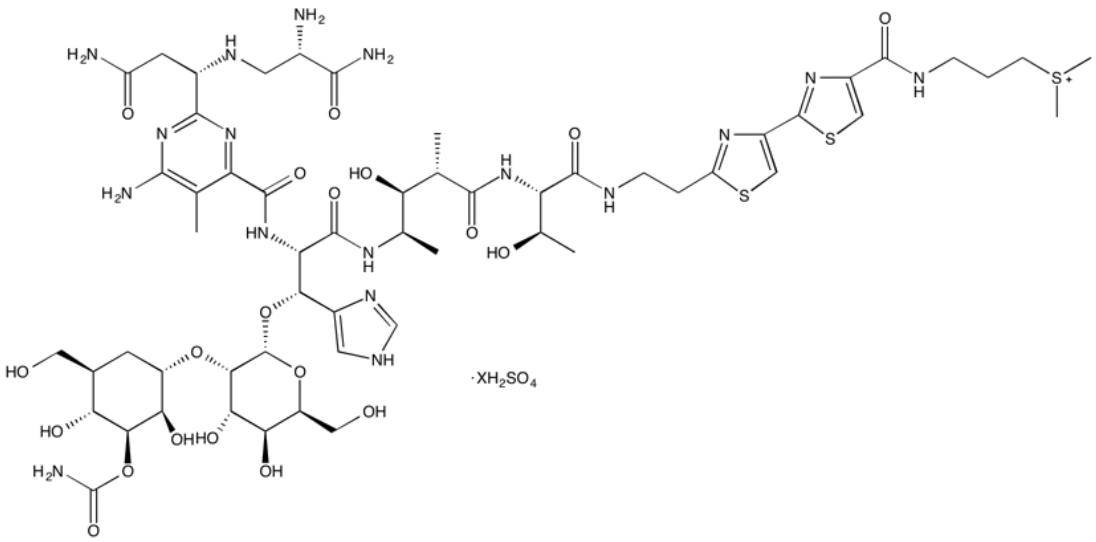
Catalog # 10-2623
Bleomycin sulfate
CAS# 9041-93-4
From *Streptomyces verticillus*
Lot # X101513



Coordinates with metals producing reactive oxygen species which causes oxidative damage to DNA[1] and RNA[2]. Induces double-strand DNA damage.[3] Commonly used to induce lung fibrosis in animal disease models.[4,5] Anticancer agent in clinical use.[6]

1) Petering *et al*. (1990), *The role of redox-active metals in the mechanism of action of bleomycin*; Chem. Biol. Interact., **73** 133
2) Huttenhofer *et al*. (1992), *Cleavage of tRNA by Fe(II)-bleomycin*; J. Biol. Chem., **267** 24471
3) Lee *et al.* (2017), *ASF1a Promotes Non-homologous End Joining Repair by Facilitating Phosphorylation of MDC1 by ATM at Double-Strand Breaks*; Mol. Cell **68** 61
4) Xie *et al*. (2016), *Upregulation of RGS2: a new mechanism for pirfenidone amelioration of pulmonary fibrosis*; Respir. Res., **17** 103
5) Inomata *et al.* (2014) *Pirfenidone inhibits fibrocyte accumulation in the lungs in bleomycin-induced murine pulmonary fibrosis*; Respir. Res., **15** 16
6) Tanaka *et al.* (2008) *Increased glutathione level is not involved in enhanced bleomycin sensitivity in cisplatin-resistant 2780CP cells*; Anticancer Res., **28** 2663

PHYSICAL DATA

Molecular Weight:	1512.62
Molecular Formula:	$C_{55}H_{85}N_{17}O_{25}S_4$
Purity:	Contains a mixture of A_2 (~70%) and B_2 (~30%) forms 95% by HPLC NMR: (Conforms)
Solubility:	Water (20 mg/ml)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in distilled water may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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