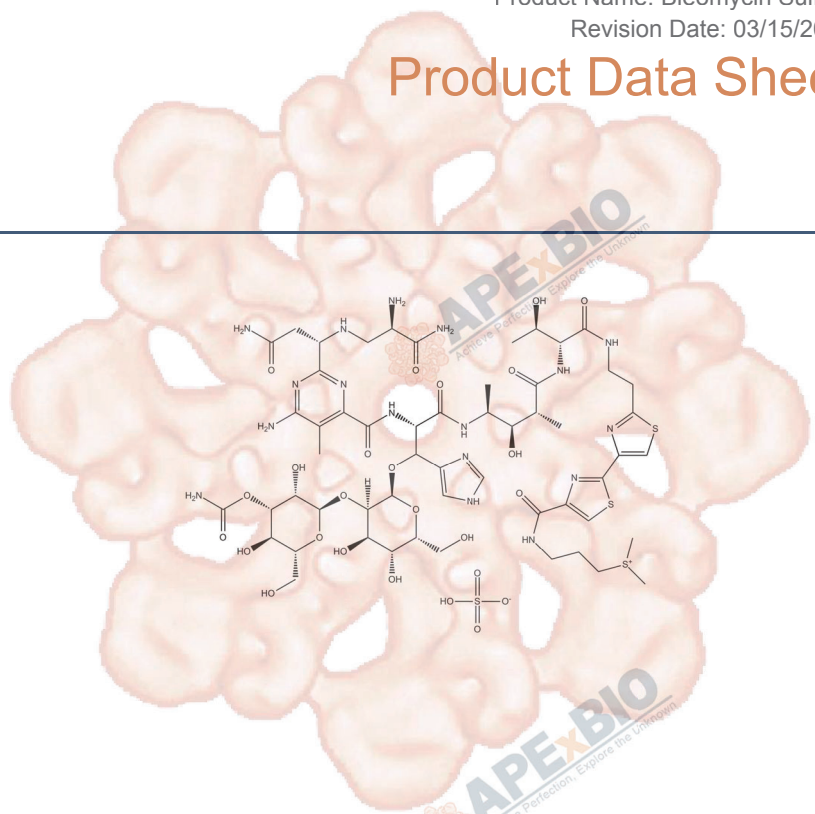


Product Data Sheet

Bleomycin Sulfate

Cat. No.:	A8331
CAS No.:	9041-93-4
Formula:	C ₅₅ H ₈₅ N ₁₇ O ₂₅ S ₄
M.Wt:	1512.6
Synonyms:	Blenoxane;Bleo;Blexane
Target:	DNA Damage/DNA Repair
Pathway:	DNA Synthesis
Storage:	Store at -20° C



Solvent & Solubility

≥ 125 mg/mL in DMSO with gentle warming, ≥ 151.3 mg/mL in H₂O with ultrasonic, insoluble in EtOH

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	0.6611 mL	3.3056 mL	6.6111 mL
		5 mM	0.1322 mL	0.6611 mL	1.3222 mL
		10 mM	0.0661 mL	0.3306 mL	0.6611 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Chemotherapy agent, induces DNA strand break	
IC ₅₀ & Target	4 nM (UT-SCC-129 cells)	
In Vitro	Cell Viability Assay	
	Cell Line:	ADIPO-P2 cells
	Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.
	Reacting conditions:	2.5 µg/mL; 30 mins
	Applications:	In ADIPO-P2 cells, Bleomycin Sulfate showed significant clastogenic effect,

which even lasted for at least 10 days after exposure.

Animal experiment

Animal models: CD-1 mice

Dosage form: 5 mg/kg, 2 ml/kg, intratracheally

Applications: Bleomycin Sulfate promoted the development of inflammation, resulting in severe pulmonary fibrosis, as well as simultaneous increasing of TGF- β 1, Smad3 and STAT1.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Paviolo NS, Quiroga IY, Castrogiovanni DC, Bianchi MS, Bolzán AD. Telomere instability is present in the progeny of mammalian cells exposed to bleomycin. *Mutat Res.* 2012 Jun 1;734(1-2):5-11.
- [2]. Shi K, Jiang J, Ma T, Xie J, Duan L, Chen R, Song P, Yu Z, Liu C, Zhu Q, Zheng J. Dexamethasone attenuates bleomycin-induced lung fibrosis in mice through TGF- β , Smad3 and JAK-STAT pathway. *Int J Clin Exp Med.* 2014 Sep 15;7(9):2645-50.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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