Coordinates with metals producing reactive oxygen species which causes oxidative damage to DNA¹ and RNA². Induces double-strand DNA damage³. Commonly used to induce lung fibrosis in animal disease models⁴,⁵. Anticancer agent in clinical use⁶.

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), *ASF1α Promotes Non-homologous End Joining Repair by Facilitating Phosphorylation of MDC1 by ATM at Double-Strand Breaks*; Mol. Cell 68 61
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:** C₅₅H₈₅N₁₇O₂₅S₄
- **Purity:** Contains a mixture of A₂ (~70%) and B₂ (~30%) forms
- **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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