Phleomycin
Item No. 15549

CAS Registry No.: 11006-33-0
Formal Name: (2R,3S,4S,5R,6R)-2-((2R,3S,4S,5S,6S)-2-(6-amino-2-(3-amino-1-((2,3-diamino-3-oxopropyl)amino)-3-oxopropyl)-5-methylpyrimidine-4-carboxamido)-3-((1-(2-(4-(4-guanidinobuty1) carbamoyl)-4',5'-dihydro-[2,4',6'-thiazolo]-2'-yl)ethyl) amino)-3-hydroxy-1-oxobutan-2-yl)amino)-3-hydroxy-4-methyl-5-oxopen tan-2-yl)amino)-1-(1H-imidazo[4-yl]-3-oxopropoxy)-4,5-dihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-3-yl(oxo)-3,5-dihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-4-yl carbamate, copper(II) salt, monohydrochloride

MF: C_{55}H_{85}N_{20}O_{21}S_{2}Cu • HCl
FW: 1,526.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \lambda_{max} 242, 300 nm

Laboratory Procedures
For long term storage, we suggest that phleomycin be stored as supplied at -20°C. It should be stable for at least two years.
Phleomycin is supplied as a crystalline solid. Aqueous solutions of phleomycin may be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of phleomycin in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.
Phleomycin is a glycopeptide antibiotic from Streptomyces whose cytotoxic action results from its ability to cause DNA fragmentation.\(^1,2\) The ability of phleomycin to block mammalian cells from entering mitosis has made it useful in cancer therapy, most commonly in conjunction with other therapeutic modalities.\(^3,4\) Phleomycin is also used, in conjunction with a vector carrying the bleomycin resistance protein b1, as a selective agent in the transformation of yeast, plant cells, and mammalian cells.\(^5,7\)

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/15549

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.