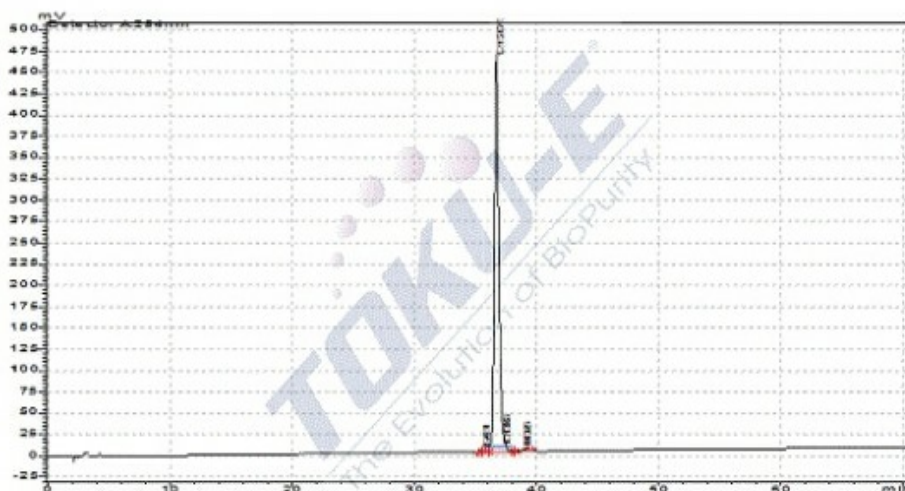


<b>Product Name:</b>	Bleomycin A2 sulfate, EvoPure®
<b>Product Number:</b>	B019
<b>CAS Number:</b>	11116-31-7 (Bleomycin A2 base)
<b>Molecular Formula:</b>	$C_{55}H_{84}N_{17}O_{21}S_3 \cdot xH_2SO_4$ (lot specific)
<b>Molecular Weight:</b>	1415.55 (Free base)
<b>Form:</b>	Powder
<b>Appearance:</b>	White or off-white crystalline powder
<b>Solubility:</b>	Water: 20 mg/mL
<b>Source:</b>	<i>Streptomyces verticillus</i>
<b>pH:</b>	4.5-6.0
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	<p>Bleomycin A2 Sulfate, EvoPure® is a glycopeptide antibiotic used as a chemotherapeutic agent in the treatment of Hodgkin's lymphoma. Bleomycin A2 is structurally similar to the other compound found in Bleomycin (Bleomycin B2) and differs only by a terminal amine group.</p> <p>We also offer:</p> <ul style="list-style-type: none"><li>• <u>Bleomycin B2 sulfate, EvoPure® (B020)</u></li><li>• <u>Bleomycin sulfate (B005)</u></li><li>• <u>Demethylbleomycin A2 sulfate, EvoPure® (D023)</u></li></ul>
<b>Mechanism of Action:</b>	<p>The exact mechanism of action is not well defined; however, it is thought to chelate metallic ions to decrease enzyme activity and stability. This effect is believed to cause enzymes to react with oxygen producing free radicals which cause single-strand breaks in deoxyribose sugar.</p>
<b>Plant Biology Applications</b>	<p>Bleomycin has been used in gene selection of tobacco, as only plants containing the Ble resistance gene were able to survive in the presence of Bleomycin (Miki et al, 2003).</p>
<b>Cancer Applications</b>	<p>Common treatment for Hodgkin's lymphoma.</p>

## Technical Data:

### HPLC chromatogram demonstrating purity of Bleomycin A2 Sulfate, EvoPure® (single fraction)



## References:

Kole, C., Michler C.H., Abbott A.G. and Hall C.T. 2010. Transgenic Crop Plants: Volume 1: Principles and Development. Springer

Miki B., McHugh S., 2003 Selectable marker genes in transgenic plants: applications, alternatives and biosafety. *Journal of Biotechnology* 107 (2004) 193–232.

Dorr, R. T. "Bleomycin Pharmacology: Mechanism of Action and Resistance, and Clinical Pharmacokinetics." *Seminars in Oncology* 19.2 (1992): 3-8. *Ncbi.gov*. Web. 11 Sept. 2012.

"Monographs: Pharmaceutical Substances: Bleomycini Hydrochloridum - Bleomycin Hydrochloride." *The International Pharmacopoeia*. N.p., n.d. Web. 16 Jan. 2013.

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