

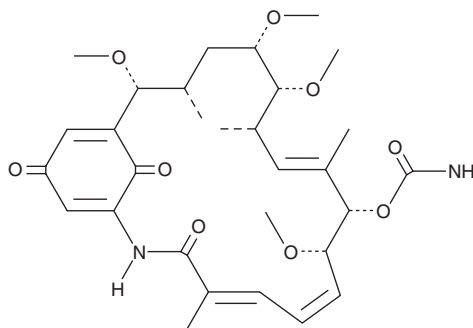
PRODUCT INFORMATION



Herbimycin A

Item No. 15504

CAS Registry No.: 70563-58-5
Formal Name: 17-demethoxy-15R-methoxy-11-O-methyl-geldanamycin
Synonyms: Antibiotic TAN 420F, NSC 305978
MF: C₃₀H₄₂N₂O₉
FW: 574.7
Purity: ≥95%
Supplied as: A lyophilisate
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Herbimycin A is supplied as a lyophilisate. A stock solution may be made by dissolving the herbimycin A in the solvent of choice, which should be purged with an inert gas. Herbimycin A is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

Description

Herbimycin A is a benzoquinone ansamycin antibiotic from *Streptomyces*.¹ It has herbicidal activity and acts as a cell-permeable inhibitor of non-receptor tyrosine kinases and the heat shock protein Hsp90.¹⁻³ Herbimycin A inhibits Bcr-Abl with an IC₅₀ value of 5 μM, a concentration that also effectively blocks Src, Yes, Fps, Ros, and ErbB but not protein kinases (PK) PKA, PKC, Rac, Myc, or Raf.^{2,4} Presumably through its effects on tyrosine kinase signaling, herbimycin A also impairs endothelial cell proliferation in the context of angiogenesis, NF-κB activation, phosphorylation of phospholipase C-γ1, and eggshell formation in schistosome parasites.⁵⁻⁸ Ansamycins, including herbimycin A and geldanamycin (Item No. 13355), bind Hsp90 and destabilize client proteins, including Src, Bcr-Abl, and ErbB2, leading to their ubiquitination and proteasomal degradation.^{3,9}

Reference

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WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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