

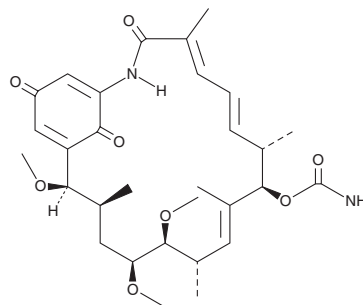
# PRODUCT INFORMATION



## Macbecin I

Item No. 22225

**CAS Registry No.:** 73341-72-7  
**Formal Name:** 6,17-didemethoxy-15R-methoxy-6-methyl-11-O-methyl-geldanamycin  
**Synonyms:** (+)-Macbecin I, NSC 330499  
**MF:** C<sub>30</sub>H<sub>42</sub>N<sub>2</sub>O<sub>8</sub>  
**FW:** 588.7  
**Purity:** ≥95%  
**Supplied as:** A lyophilized solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Macbecin I is supplied as a lyophilized solid. A stock solution may be made by dissolving the macbecin I in the solvent of choice, which should be purged with an inert gas. Macbecin I is soluble in DMSO.

### Description

Macbecin I is a benzoquinone ansamycin antibiotic that binds to and inhibits heat shock protein 90 (Hsp90) *in vitro* (IC<sub>50</sub> = 2 μM for Hsp90 ATPase activity).<sup>1</sup> Macbecin I inhibits growth of 38 cancer cell lines (mean IC<sub>50</sub> = 0.4 μM), with prostate DU145 cells being the most sensitive (IC<sub>70</sub> < 0.01 μM). DU145 cells treated with macbecin I (1-10 μM) show dose-dependent degradation of the Hsp90 client proteins ErbB2 and cRaf1, consistent with the mechanism of Hsp90 inhibition. Macbecin I, at a dose of 10 mg/kg, inhibits tumor growth and delays disease progression in a human prostate carcinoma DU145 xenograft model.

### Reference

1. Martin, C.J., Gassier, S., Challis, I.R., *et al.* Molecular characterization of macbecin as an Hsp90 inhibitor. *J. Med. Chem.* **51**(9), 2853-2857 (2008).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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