

Catalog # 10-2069

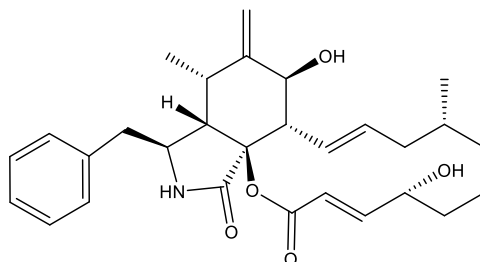
Cytochalasin B

CAS# 14930-96-2

NSC107658; Phominone

Fermentation product from *Drechslera dematioidea*

Lot # X101721



A cell permeable fungal toxin which binds to the barbed end of actin, inhibiting its polymerization.¹ Inhibits cell division, migration and glucose transport.² Causes cell cycle arrest at G₂/M and induces apoptosis in HCT-116 colorectal carcinoma cells.³ Cytochalasin B-induced membrane vesicles (CIMVs) retain cell surface receptors of the parent cells and retain fusion specificity with target cells.⁴ CIMVs are a promising new vector system for drug and biomolecule delivery due to their natural origin and participation in intercellular communication.⁵

- 1) Threadoropoulos *et al.* (1994), *Cytochalasin B may shorten actin filaments by a mechanism independent of barbed end capping*; *Biochem. Pharmacol.*, **47** 1875
- 2) Whitesell *et al.* (2005), *Compartmentalization of transport and phosphorylation of glucose in a hepatoma cell line*; *Biochem. J.*, **386** 245
- 3) Buldak *et al.* (2014), *Changes in subcellular localization of visfatin in human colorectal HCT-116 carcinoma cell line after cytochalasin B treatment*; *Eur. J. Histochem.*, **58** 2408
- 4) Gomzikova *et al.* (2018), *Evaluation of cytochalasin B-Induced Membrane Vesicles Fusion specificity with Target Cells*; *Biomed. Res. Int.*, **2018** 7053623
- 5) Gomzikova *et al.* (2017), *Cytochalasin B-induced membrane vesicles convey angiogenic activity of parental cells*; *Oncotarget*, **8** 70496

PHYSICAL DATA

Molecular Weight:	479.61
Molecular Formula:	C ₂₉ H ₃₇ NO ₅
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 5 mg/ml) or Ethanol (10 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 3 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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