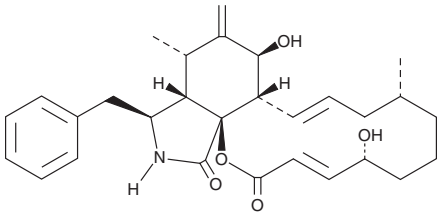
PRODUCT INFORMATION

Cytochalasin B (solution)

Item No. 46789

CAS Registry No.: 14930-96-2
Formal Name: (3E,5R,9R,11E,12aS,13S,15S,15aS,16S,18aS)-6,7,8,9,10,12a,13,14,15,15a,16,17-dodecahydro-5,13-dihydroxy-9,15-dimethyl-14-methylene-16-(phenylmethyl)-2H-oxacyclotetradecino[2,3-d]isoindole-2,18(5H)-dione
Synonyms: NSC 107658, Phomin
MF: $C_{29}H_{37}NO_5$
FW: 479.6
Purity: ≥98%
Supplied as: A 10 mg/ml solution in DMSO
Storage: -20°C
Stability: ≥2 years
Item Origin: Microbial fermentation



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

Description

Cytochalasin B is a cell-permeable mycotoxin that binds to the barbed end of actin, reversibly inhibiting the elongation and shortening of actin filaments.[1] By disrupting actin polymerization, cytochalasin B blocks diverse cellular functions, including cell division, migration, phagocytosis, exocytosis, chemotaxis, and glucose transport.[2,4] Cytochalasin B is broadly used in cytological studies involving any of these many processes that depend on actin polymerization.[5-7]

References

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2. Steinberg, M.S. and Wiseman, L.L. Do morphogenetic tissue rearrangements require active cell movements? The reversible inhibition of cell sorting and tissue spreading by cytochalasin B. *J. Cell Biol.* **55**, 606-615 (1972).
3. Spudich, J.A. and Lin, S. Cytochalasin B, its interaction with actin and actomyosin from muscle (cell movement/microfilaments/rabbit striated muscle). *Proc. Natl. Acad. Sci. USA* **69(2)**, 442-446 (1972).
4. Estensen, R.D. and Plagemann, P.G.W. Cytochalasin B: Inhibition of glucose and glucosamine transport. *Proc. Natl. Acad. Sci. USA* **69(6)**, 1430-1434 (1972).
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6. Yu, Y., Dumollard, R., Rossbach, A., *et al*. Redistribution of mitochondria leads to bursts of ATP production during spontaneous mouse oocyte maturation. *J. Cell. Physiol.* **224(3)**, 672-680 (2010).
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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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