



Cytochalasin D

PRODUCT ANALYSIS SHEET

Catalog Number:	PHZ1063
Lot Number:	See product label
Quantity:	1.0 mg
Appearance:	White solid
Molecular Formula:	C ₃₀ H ₃₇ NO ₆
Molecular Weight:	507.6
Purity:	98%
Summary:	Cytochalasin D is a cell permeable fungal toxin that binds to the barbed end of actin filaments inhibiting both the association and dissociation of subunits. This compound causes the disruption of actin filaments and inhibition of actin polymerization. Cytochalasin D is about 10-fold more effective than cytochalasin B, and does not inhibit monosaccharide transport across cell membranes.
Solubility:	Soluble in DMSO at a concentration of 25 mg/mL.
Sterility:	This product is not sterile.
Storage:	Store, as supplied, at -20°C. Upon solubilization, apportion into working aliquots and store at -20°C. Avoid repeated freeze/thaw cycles. Solutions are stable at -20°C for up to three months.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
Related Products:	FAK Sample Pack, Cat. # 44-631 JNK1&2 [pTpY ^{183/185}] antibody, Cat. # 44-682G Akt/PKB [pS ⁴⁷³] antibody, Cat. # 44-622G Paxillin [pY ³¹] antibody, Cat. # 44-720G
References:	Flanagan, M.D. and S. Lin (1980) Cytochalasins block actin filament elongation by binding to high affinity sites associated with F-actin. <i>J. Biol. Chem.</i> 255(3):835-838. Goddette, D.W. and C. Frieden (1986) Actin polymerization. The mechanism of action of cytochalasin D. <i>J. Biol. Chem.</i> 261(34):15974-15980. Cooper, J.A. (1987) Effects of cytochalasin and phalloidin on actin. <i>J. Cell Biol.</i> 105(4):1473-1478. Tangkijvanich, P., et al. (2002) Platelet-derived growth factor-BB and lysophosphatidic acid distinctly regulate hepatic myofibroblast migration through focal adhesion kinase. <i>Exp. Cell. Res.</i> 281(1):140-147. Goel, H.L., and C.S. Dey (2002) PKC-regulated myogenesis is associated with increased tyrosine phosphorylation of FAK, Cas, and paxillin, formation of Cas-CRK complex, and JNK activation. <i>Differentiation</i> 70(6):257-271. Tran, N.L., et al. (2002) Signal transduction from N-cadherin increases Bcl-2. Regulation of the phosphatidylinositol 3-kinase/Akt pathway by homophilic adhesion and actin cytoskeletal organization. <i>J. Biol. Chem.</i> 277(36):32905-32914.
Caution:	Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.

This product is for research use only. Not for use in diagnostic procedures.

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Manufactured under ISO 13485 Quality Standard

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