

Certificate of Analysis

www.tocris.com

Product Name: Cytochalasin B

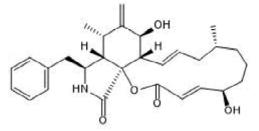
Catalog No.: 5474 Batch No.: 6

CAS Number: IUPAC Name: 14930-96-2

(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 - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - dione - 16 - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - (phenylmethyl) - 2H - oxacyclotetradecino[2, 3 - d]isoindole - 2, 18(5H) - (phenylmethyl) - (phenylmethylmethyl) - (phenylmethylmethyl) - (phenylmethylmethylmethylmethylmethylmethyl) - (phenylmethylmethylmethylmethylmethylmethylmethyl)

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: Storage: Batch Molecular Structure: $C_{29}H_{37}NO_5$ 479.61 White solid DMSO to 10 mM with gentle warming Store at -20°C



2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: Microanalysis:

Shows 98.7% purity Consistent with structure Consistent with structure

| Carbon Hydrogen Nitrogen |
|--------------------------|
|--------------------------|

| Theoretical | 72.62 | 7.78 | 2.92 |
|-------------|-------|------|------|
| Found | 72.63 | 7.99 | 2.93 |

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

| bio-techne.com | North America | China | Europe Middle East Africa | Rest of World |
|---|---------------------|--|---------------------------|--|
| info@bio-techne.com techsupport@bio-techne.com | Tel: (800) 343 7475 | info.cn@bio-techne.com Tel: +86 (21) 52380373 | Tel: +44 (0)1235 529449 | www.tocris.com/distributors Tel:+1 612 379 2956 |



www.tocris.com

Product Name: Cytochalasin B

14930-96-2

Catalog No.: 5474 Batch No.: 6

CAS Number: IUPAC Name:

(3*E*,5*R*,9*R*,11*E*,12a*S*,13*S*,15*S*,15*aS*,16*S*,18a*S*)-6,7,8,9,10,12a,13,14,15,15a,16,17-Dodecahydro-5,13dihydroxy-9,15-dimethyl-14-methylene-16-(phenylmethyl)-2*H*-oxacyclotetradecino[2,3-d]isoindole-2,18(5*H*)-dione

Description:

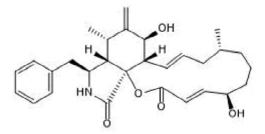
Cytochalasin B is an inhibitor of actin polymerization. Inhibits cell division, migration and glucose transport. Causes G_2/M cell cycle arrest and apoptosis in HCT-116 colorectal carcinoma cells. Cell permeable.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₉H₃₇NO₅ Batch Molecular Weight: 479.61 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 10 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

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. PMID: 25308845.

Whitesell *et al* (2005) Compartmentalization of transport and phosphorylation of glucose in a hepatoma cell line. Biochem.J. **386** 245. PMID: 15473866.

Theodoropoulos *et al* (1994) Cytochalasin B may shorten actin filaments by a mechanism independent of barbed end capping. Biochem.Pharmacol. **47** 1875. PMID: 8204105.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

| bio-techne.com | North America | China | Europe Middle East Africa | Rest of World |
|---|---------------------|--|---------------------------|--|
| info@bio-techne.com techsupport@bio-techne.com | Tel: (800) 343 7475 | info.cn@bio-techne.com Tel: +86 (21) 52380373 | Tel: +44 (0)1235 529449 | www.tocris.com/distributors Tel:+1 612 379 2956 |