

Certificate of Analysis

Print Date: Nov 19th 2018

www.tocris.com

Product Name: (R)-(+)-Blebbistatin Catalog No.: 1853 Batch No.: 4

CAS Number: 1177356-70-5

IUPAC Name: (3aR)-(+)-1,2,3,3a-Tetrahydro-3a-hydroxy-6-methyl-1-phenyl-4H-pyrrolo[2,3-b]quinolin-4-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{16}N_2O_2$ Batch Molecular Weight:292.34Physical Appearance:Yellow solid

Solubility: DMSO to 100 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
Chiral HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 73.95 5.52 9.58 Found 73.6 5.57 9.61

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



Product Information

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Description:

Inactive enantiomer of the selective inhibitor of myosin II (±)-blebbistatin. Active Enantiomer and Racemate also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{18}H_{16}N_2O_2$ Batch Molecular Weight: 292.34 Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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:

Limouze et al (2004) Specificity of blebbistatin, an inhibitor of myosin II. J.Muscle Res.Cell Motil. 25 337. PMID: 15548862.

Straight et al (2003) Dissecting temporal and spatial control of cytokinesis with a myosin II inhibitor. Science 299 1743. PMID: 12637748.

Straight et al (2002) Dissecting cytokinesis with small molecules. Amer.Soc.Cell Biol.Abstr. 2515.