

# **Certificate of Analysis**

Print Date: Feb 28th 2024

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Product Name: SL 0101-1 Catalog No.: 2250 Batch No.: 4

CAS Number: 77307-50-7

IUPAC Name:  $3-[(3,4-Di-O-acetyl-6-deoxy-\alpha-L-mannopyranosyl)oxy]-5,7-dihydro-2-(4-hydroxyphenyl)-4H-1benzopyran-4-one$ 

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{24}O_{12}$ Batch Molecular Weight:516.46Physical Appearance:Yellow solidSolubility:DMSO to 10 mMStorage:Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

HPLC: Shows 95.8% purity

Mass Spectrum: Consistent with structure



## **Product Information**

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#### **Description:**

SL 0101-1 is a selective inhibitor of ribosomal S6 kinase (RSK) ( $IC_{50}$  = 89 nM for RSK2). Does not inhibit upstream kinases such as MEK, Raf and PKC. Inhibits the growth of MCF-7 human breast cancer cells with no effect on the normal breast cell line.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>25</sub>H<sub>24</sub>O<sub>12</sub> Batch Molecular Weight: 516.46 Physical Appearance: Yellow solid

Minimum Purity: ≥95%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

#### Solubility & Usage Info:

DMSO to 10 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

**Saha** et al (2012) RSK phosphorylates SOS1 creating 14-3-3-docking sites and negatively regulating MAPK activation. Biochem.J. **447** 159. PMID: 22827337.

Bain et al (2007) The selectivity of protein kinase inhibitors: a further update. Biochem.J. 408 297. PMID: 17850214.

Godeny and Sayeski (2006) ERK1/2 regulates ANG II-dependent cell proliferation via cytoplasmic activation of RSK2 and nuclear activation of elk1. Am. J. Cell. Physiol. 291 1308.

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