



# **Certificate of Analysis**

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Product Name: L-690,488 Catalog No.: 0682 Batch No.: 2

CAS Number: 142523-14-6

IUPAC Name: 1-[(4-Hydroxyphenoxy)ethylidene] bis[phosphinylidynebis(oxymethylene)]-2,2-dimethylpropanoate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{32}H_{52}O_{16}P_2$ 

Batch Molecular Weight: 754.7

Physical Appearance: Colourless lyophilised film

**Solubility:** ethanol to 100 mM

DMSO to 100 mM

Storage: Store at -80°C

**Batch Molecular Structure:** 

Me || O Me || O CH<sub>2</sub>OCOCMe<sub>3</sub> O CH<sub>2</sub>OCOCMe<sub>3</sub> O CH<sub>2</sub>OCOCMe<sub>3</sub>

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.53$  (Ethyl acetate:Petroleum ether [1:1])

**HPLC:** Shows 98% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure



## **Product Information**

Print Date: Sep 16<sup>th</sup> 2016 **WWW.tocris.com** 

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IUPAC Name: 1-[(4-Hydroxyphenoxy)ethylidene]bis[phosphinylidynebis(oxymethylene)]-2,2-dimethylpropanoate

## **Description:**

Cell-permeable prodrug of the potent inositol monophosphatase inhibitor L-690,330 (Cat. No. 0681); penetrates cells more effectively than its metabolite.

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

Batch Molecular Formula:  $C_{32}H_{52}O_{16}P_2$ 

Batch Molecular Weight: 754.7

Physical Appearance: Colourless lyophilised film

## **Minimum Purity:** >98%

## **Batch Molecular Structure:**

**Storage:** Store at -80°C. This product is packaged under an inert atmosphere.

## Solubility & Usage Info:

ethanol to 100 mM DMSO to 100 mM

CAUTION - This product is supplied as a lyophilized oil 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.

#### **Licensing Information:**

Sold with the permission of Merck Sharp and Dohme Ltd.

#### References:

Chen et al (1998) Stimulatory effect of lithium on glucose transport in rat adipocytes is not mediated by elevation of IP<sub>1</sub>. Am.J.Physiol. **275** E272. PMID: 9688629.

**Atack** *et al* (1994) Effects of L-690,488, a prodrug of the bisphosphonate inositol monophosphatase inhibitor L-690,330, on phosphatidylinositol cycle markers. J.Pharmacol.Exp.Ther. **270** 70. PMID: 8035344.