Certificate of Analysis

www.tocris.com

Print Date: Jun 16th 2018

Product Name: Xanthohumol

Catalog No.: 4686 Batch

Batch No.: 2

CAS Number: 6754-58-1

(2E)-1-[2,4-Dihydroxy-6-methoxy-3-(3-methyl-2-buten-1-yl)phenyl]-3-(4-hydroxyphenyl)-2-propen-1-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

Batch Molecular Structure:

 $C_{21}H_{22}O_5.14H_2O$ 358.9 Yellow solid DMSO to 100 mM ethanol to 100 mM Store at +4°C

OH 0 HO OMe OH

2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: Microanalysis: Shows 99.4% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen

 Theoretical
 70.28
 6.32

 Found
 70.62
 6.3

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

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IUPAC Name:

Storage:

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Description:

IUPAC Name:

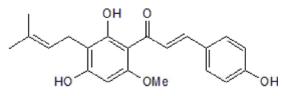
p97 ATPase (VCP) inhibitor. Binds to the N domain of p97, impairing autophagosome function and maturation. Inhibits proliferation and induces apoptosis in a variety of human cancer cell lines. Also inhibits DGAT in rat liver microsomes (IC₅₀ = 50.3 μ M).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₂₂O₅.¹/₄H₂O Batch Molecular Weight: 358.9 Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

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:

Sasazawa *et al* (2012) Xanthohumol impairs autophagosome maturation through direct inhibition of valosin-containing protein. ACS Chem.Biol. **7** 892. PMID: 22360440.

Inokoshi *et al* (2009) Expression of two human acyl-CoA:diacylglycerol acyltransferase isozymes in yeast and selectivity of microbial inhibitors toward the isozymes. J.Antibiot.(Tokyo) **62** 51. PMID: 19132064.

Tabata *et al* (1997) Xanthohumols, diacylglycerol acyltransferase inhibitors, from *Humulus lupulus*. Phytochemistry **46** 683. PMID: 9366096.

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Catalog No.: 4686 E

Batch No.: 2