

Certificate of Analysis

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Product Name: Psora 4

Catalog No.: 4367

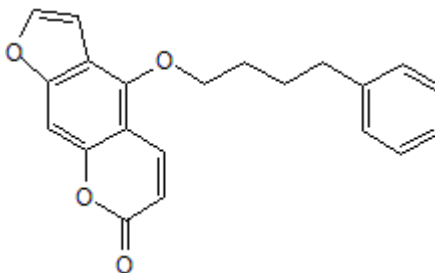
Batch No.: 1

CAS Number: 724709-68-6

IUPAC Name: 4-(4-Phenylbutoxy)-7H-furo[3,2-g][1]benzopyran-7-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₁₈O₄
Batch Molecular Weight: 334.37
Physical Appearance: White solid
Solubility: DMSO to 50 mM
ethanol to 10 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	75.43	5.43	
Found	75.49	5.3	

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

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IUPAC Name: 4-(4-Phenylbutoxy)-7H-furo[3,2-g][1]benzopyran-7-one

Description:

Potent K_v1.3 channel blocker (EC₅₀ = 3 nM). Preferentially binds the C-type inactivated state of the channel, similar to the activity of CP 339818 (Cat. No. 1399). Displays 17- to 70-fold selectivity over closely-related K_v1 channels (K_v1, K_v2, K_v4 and K_v7); exhibits activity at K_v1.5 (IC₅₀ = 7.7 nM). Suppresses proliferation of human and rat myelin-specific effector memory T cells (EC₅₀ values are 25 and 60 nM respectively).

Physical and Chemical Properties:

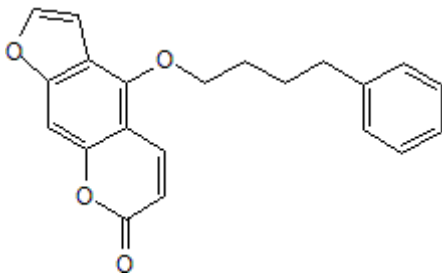
Batch Molecular Formula: C₂₁H₁₈O₄

Batch Molecular Weight: 334.37

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Vennekamp et al (2004) Kv1.3-blocking 5-phenylalkoxy-psoralens: a new class of immunomodulators. *Mol.Pharmacol.* **65** 1364. PMID: 15155830.

Schmitz et al (2005) Design of PAP-1, a selective small molecule Kv1.3 blocker, for the suppression of effector memory T cells in autoimmune diseases. *Mol.Pharmacol.* **68** 1254. PMID: 16099841.

Li et al (2006) Voltage-gated potassium channel Kv1.3 regulates GLUT4 trafficking to the plasma membrane via a Ca²⁺-dependent mechanism. *Am.J.Physiol.Cell Physiol.* **290** C345. PMID: 16403947.

Storage: Store at -20°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 50 mM

ethanol to 10 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.

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