

Certificate of Analysis

Print Date: Oct 31st 2022

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Product Name: AS2717638 Catalog No.: 7730 Batch No.: 1

CAS Number: 2148339-28-8

IUPAC Name: 6,7-Dimethoxy-2-(5-methyl-1,2-benzisoxazol-3-yl)-4-(1-piperidinylcarbonyl)-1(2H)-isoquinolinone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{25}N_3O_5$ Batch Molecular Weight: 447.48

Physical Appearance: Off-white solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.1 5.63 9.39 Found 66.69 5.55 9.18

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



Product Information

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IUPAC Name: 6,7-Dimethoxy-2-(5-methyl-1,2-benzisoxazol-3-yl)-4-(1-piperidinylcarbonyl)-1(2H)-isoquinolinone

Description:

AS2717638 is a potent LPA5 receptor antagonist (IC $_{50}$ = 38 nM in BV-2 microglia cells). It is selective for LPA5 over LPA1, LPA2, and LPA3. It inhibits LPA-mediated pro-inflammatory transcription factor phosphorylation. In vivo, AS2717638 inhibits LPA5 agonist-induced allodynia in mice. It also exhibits analgesic effects against both neuropathic and inflammatory pain in rodent models. Orally bioavailable and brain penetrant.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{25}H_{25}N_3O_5$ Batch Molecular Weight: 447.48 Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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.

References:

Joshi *et al* (2022) Lysophosphatidic acid receptor 5 (LPA5) knockout ameliorates the neuroinflammatory response *in vivo* and modifies the inflammatory and metabolic landscape of primary microglia *in vitro*. Cells **11** 1071. PMID: 35406635.

Joshi et al (2021) Inhibition of autotaxin and lysophosphatidic acid receptor 5 attenuates neuroinflammation in LPS-activated BV-2 microglia and a mouse endotoxemia model. Int.J.Mol.Sci. 22 8519. PMID: 34445223.

Medeiros Geraldo *et al* (2021) Role of lysophosphatidic acid and its receptors in health and disease: novel therapeutic strategies. Signal Transduct.Target.Ther. *6* 45. PMID: 33526777.