

Certificate of Analysis

Product Name: LY 303511

Catalog No.: 2418

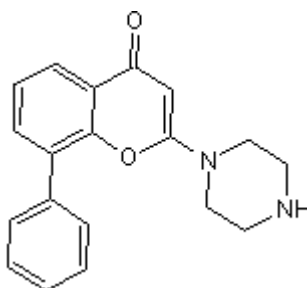
Batch No.: 1

CAS Number: 154447-38-8

IUPAC Name: 2-(1-Piperazinyl)-8-phenyl-4*H*-1-benzopyran-4-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₈N₂O₂·¼H₂O
Batch Molecular Weight: 310.86
Physical Appearance: Yellow solid
Solubility: 1eq. HCl to 100 mM
DMSO to 100 mM
ethanol to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.35 (Dichloromethane:Methanol [7.3:1])
HPLC: Shows >99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	73.41	5.99	9.01
Found	73.72	5.99	8.92

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

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Description:

Negative control compound with respect to LY 294002 (Cat. No. 1130) PI 3-kinase inhibitory activity. Blocks voltage-gated potassium (K_v) channels (IC_{50} = 64.6 μ M) and inhibits IL-1 β -stimulated NF- κ B activation, attenuating MCP-1 expression. Antiproliferative. Also inhibits the BET bromodomain proteins BRD2, BRD3 and BRD4.

Physical and Chemical Properties:

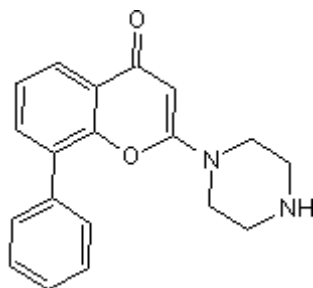
Batch Molecular Formula: C₁₉H₁₈N₂O₂·¼H₂O

Batch Molecular Weight: 310.86

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Ei-kholy et al (2003) The phosphatidylinositol 3-kinase inhibitor LY294002 potently blocks K_v currents via a direct mechanism. *FASEB J.* **17** 720. PMID: 12586735.

Choi et al (2004) LY294002 inhibits monocyte chemoattractant protein-1 expression through a phosphatidylinositol 3-kinase-independent mechanism. *FEBS Letters.* **559** 141. PMID: 14960322.

Kristof et al (2005) LY303511 (2-Piperazinyl-8-phenyl-4*H*-1-benzopyran-4-one) acts via phosphatidylinositol 3-kinase-independent pathways to inhibit cell proliferation via mammalian target rapamycin (mTOR)- and non-mTOR-dependent mechanisms. *J.Pharmacol.Exp.Ther.* **314** 1134. PMID: 15923340.

Storage: Store at +4°C

Solubility & Usage Info:

1eq. HCl to 100 mM

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.

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