

Product Name: Apilimod dimesylate

Catalog No.: 7283

Batch No.: 1

CAS Number: 870087-36-8

IUPAC Name: 4-(6-(2-(3-Methylbenzylidene)hydrazinyl)-2-(2-(pyridin-2-yl)ethoxy)pyrimidin-4-yl)morpholine dimethanesulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₆N₆O₂·2CH₃SO₃H·¾H₂O

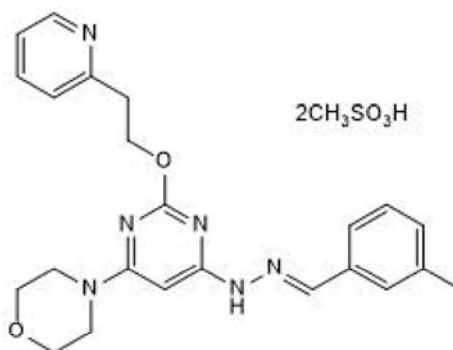
Batch Molecular Weight: 624.21

Physical Appearance: Off-white solid

Solubility: water to 100 mM
DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	48.1	5.73	13.46
Found	47.7	5.62	13.29

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: Apilimod dimesylate

Catalog No.: 7283

1

CAS Number: 870087-36-8

IUPAC Name: 4-(6-(2-(3-Methylbenzylidene)hydrazinyl)-2-(2-(pyridin-2-yl)ethoxy)pyrimidin-4-yl)morpholine dimethanesulfonate

Description:

Apilimod dimesylate is a potent and selective PIKfyve inhibitor (IC₅₀ = 14 nM). Exhibits no significant activity at other lipid kinases and protein kinases, including PIP4K, PIP5K, mTOR, PI3K and PI4K. Inhibits cellular entry by SARS-CoV-2, MERS-CoV and MHV S pseudovirions. Apilimod dimesylate reduces the number of SARS-CoV-2-infected hiPSC-derived pneumocyte-like cells by 85% and inhibits SARS-CoV-2 replication in donor lung tissue. Also exhibits selective cytotoxicity in B-cell non-Hodgkin lymphoma compared with normal cells. Inhibits production of IL-12 and IL-23. In motor neurons derived from patients with amyotrophic lateral sclerosis (A... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

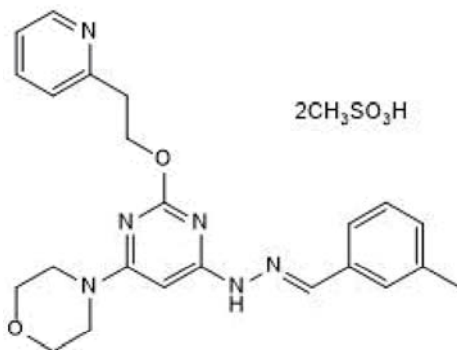
Batch Molecular Formula: C₂₃H₂₆N₆O₂.2CH₃SO₃H.¼H₂O

Batch Molecular Weight: 624.21

Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Hung et al (2023) PIKFYVE inhibition mitigates disease in models of diverse forms of ALS. Cell. PMID: 36754049.

Ou et al (2020) Characterization of spike glycoprotein of SARS-CoV-2 on virus entry and its immune cross-reactivity with SARS-CoV. Nat. Commun. **11** 1620. PMID: 32221306.

Riva et al (2020) Discovery of SARS-CoV-2 antiviral drugs through large-scale compound repurposing. Nature **586** 113. PMID: 32707573.

Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM

DMSO to 50 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.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956