

Certificate of Analysis

Print Date: Sep 22nd 2020

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Product Name: KU 0063794 Catalog No.: 3725 Batch No.: 5

CAS Number: 938440-64-3

 $IUPAC \ Name: \ rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-d]pyrimidin-7-yl]-2-rel-5-[2-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-(4-morpholinyl)pyrido[2,3-dimethyl-4-morph$

methoxybenzenemethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{31}N_5O_4$ Batch Molecular Weight: 465.54

Physical Appearance: Off White solid
Solubility: DMSO to 10 mM
Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 64.5 6.71 15.04 Found 64.51 6.76 14.96



Product Information

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methoxybenzenemethanol

Description:

Selective inhibitor of mammalian target of rapamycin (mTOR) (IC $_{50}$ ~10 nM for mTORC1 and mTORC2). Displays no activity at PI 3-kinase or 76 other kinases tested. Inhibits activation and hydrophobic motif phosphorylation of Akt, S6K and SGK, but not RSK. Suppresses cell growth and induces G_1 cell cycle arrest in vitro.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{25}H_{31}N_5O_4$ Batch Molecular Weight: 465.54 Physical Appearance: Off White solid

Minimum Purity: ≥97%

Batch Molecular Structure:

Storage: Store at RT

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:

Garcia-Martinez et al (2009) Ku-0063794 is a specific inhibitor of the mammalian target of rapamycin (mTOR). Biochem.J. 421 29. PMID: 19402821.