



Certificate of Analysis

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Product Name: PF 05212384 Catalog No.: 4823 Batch No.: 1

CAS Number: 1197160-78-3

IUPAC Name: N-[4-[(4-(Dimethylamino)-1-piperidinyl]carbonyl]phenyl]-N-[4-(4,6-di-4-morpholinyl-1,3,5-triazin-2-yl)phenyl]urea

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{32}H_{41}N_9O_4$ Batch Molecular Weight:615.73Physical Appearance:White solid

Solubility: DMSO to 5 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.42 6.71 20.47 Found 62.63 6.43 20.28



Product Information

Print Date: Dec 12th 2016 **WWW.tocris.com**

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Description:

Potent and selective dual inhibitor of PI 3-kinase/mTOR (IC $_{50}$ values are 0.4, 1.6 and 5.4 nM for PI 3-K $_{0}$, mTOR and PI 3-K $_{0}$ respectively). Exhibits selectivity over 234 other protein kinases (IC $_{50}$ >10 $_{0}$ M). Potently inhibits tumor cell growth in 37 different tumor cell lines (IC $_{50}$ < 100 nM). Also exhibits antitumor activity in MDA-361, HCT-116, H1975 and U87MG xenograft models.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₂H₄₁N₉O₄ Batch Molecular Weight: 615.73 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 5 mM with gentle warming

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.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Mallon et al (2011) Antitumor efficacy of PKI-587, a highly potent dual PI3K/mTOR kinase inhibitor. Clin.Cancer Res. 17 3193. PMID: 21325073.

Venkatesan *et al* (2010) Bis(morpholino-1,3,5-triazine) derivatives: potent adenosine 5'-triphosphate competitive phosphatidylinositol-3-kinase/mammalian target of rapamycin inhibitors: discovery of compound 26 (PKI-587), a highly efficacious dual inhibitor. J.Med.Chem. **53** 2636. PMID: 20166697.