Certificate of Analysis

Product Name: **WYE 687** **Catalog No.: 4282** **Batch No.: 1**

CAS Number: 1702364-87-1

IUPAC Name: *N*-[4-[4-(4-Morpholinyl)-1-[1-(3-pyridinylmethyl)-4-piperidinyl]-1*H*-pyrazolo[3,4-*d*]pyrimidin-6-yl]phenyl]-carbamic acid methyl ester dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{28}H_{32}N_8O_3.2HCl.2H_2O$

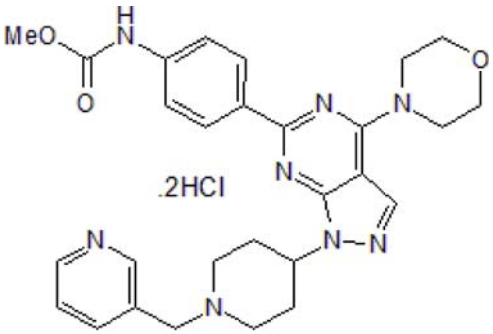
Batch Molecular Weight: 637.56

Physical Appearance: Pale brown solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.32 (Chloroform:Methanol:Ammonia soln. [95:5:0.1])

HPLC: Shows 98.0% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	52.75	6.01	17.58
Found	52.54	5.7	17.51

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 Information

Product Name: **WYE 687** **Catalog No.: 4282** **Batch No.: 1**

CAS Number: 1702364-87-1

IUPAC Name: *N*-[4-[4-(4-Morpholinyl)-1-[1-(3-pyridinylmethyl)-4-piperidinyl]-1*H*-pyrazolo[3,4-*d*]pyrimidin-6-yl]phenyl]-carbamic acid methyl ester dihydrochloride

Description:

Potent, ATP-competitive inhibitor of mammalian target of rapamycin (mTOR) (IC_{50} = 7 nM). Displays selectivity for mTOR over PI 3-Kα (~100-fold) and PI 3-Kγ (~500-fold). Inhibits phosphorylation of mTORC1 and mTORC2 substrates including S6K, SGK and Akt; blocks VEGF secretion and HIF-1α expression. Exhibits antiproliferative effects in cancer cell lines through G_1 cell cycle arrest and selective apoptosis.

Physical and Chemical Properties:

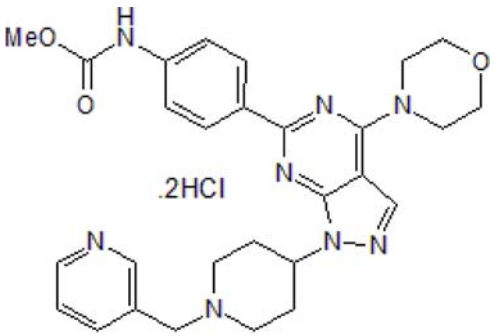
Batch Molecular Formula: $C_{28}H_{32}N_8O_3.2HCl.2H_2O$

Batch Molecular Weight: 637.56

Physical Appearance: Pale brown solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM
DMSO 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.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Yu *et al* (2009) Biochemical, cellular, and in vivo activity of novel ATP-competitive and selective inhibitors of the mammalian target of rapamycin. Cancer.Res. ***69*** (15) 6232. PMID: 19584280.

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