

Product Name: AR-C155858

Catalog No.: 4960

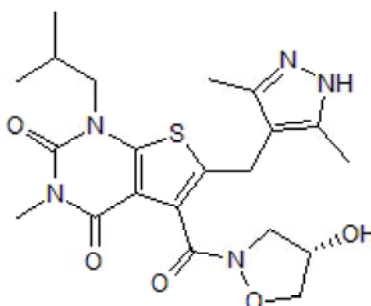
Batch No.: 3

CAS Number: 496791-37-8

IUPAC Name: 6-[(3,5-Dimethyl-1*H*-pyrazol-4-yl)methyl]-5-[[[(4*S*)-4-hydroxy-2-isoxazolidinyl]carbonyl]-3-methyl-1-(2-methylpropyl)thieno[2,3-*d*]pyrimidine-2,4(1*H*,3*H*)-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₇N₅O₅S·½H₂O
Batch Molecular Weight: 470.54
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Dichloromethane:Methanol [85:15])
HPLC: Shows 99.6% purity
Chiral HPLC: Shows 99% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	53.6	6	14.88
Found	53.57	5.99	14.76

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

Product Name: AR-C155858

Catalog No.: 4960

Batch No.: 3

CAS Number: 496791-37-8

IUPAC Name: 6-[(3,5-Dimethyl-1H-pyrazol-4-yl)methyl]-5-[[[(4S)-4-hydroxy-2-isoxazolidinyl]carbonyl]-3-methyl-1-(2-methylpropyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione

Description:

Inhibitor of the monocarboxylate transporters (MCTs) MCT1 and MCT2 (K_i values are 2.3 and <10 nM respectively). Exhibits no activity at MCT4. Blocks proliferation of Raji lymphoma cells in vitro. Inhibits glycolysis and glutathione synthesis in cancer cells.

Physical and Chemical Properties:

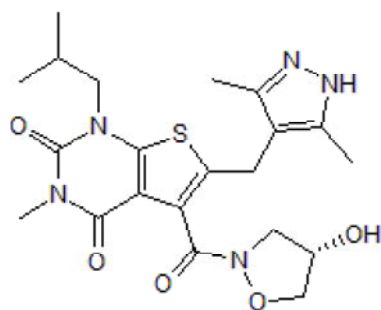
Batch Molecular Formula: $C_{21}H_{27}N_5O_5S \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 470.54

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Doherty et al (2014) Blocking lactate export by inhibiting the Myc target MCT1 Disables glycolysis and glutathione synthesis. *Cancer Res.* **74** 908. PMID: 24285728.

Ovens et al (2010) The inhibition of monocarboxylate transporter 2 (MCT2) by AR-C155858 is modulated by the associated ancillary protein. *Biochem.J.* **431** 217. PMID: 20695846.

Ovens et al (2010) AR-C155858 is a potent inhibitor of monocarboxylate transporters MCT1 and MCT2 that binds to an intracellular site involving transmembrane helices 7-10. *Biochem.J.* **425** 523. PMID: 19929853.

Storage: Store at -20°C

Solubility & Usage Info:

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 AstraZeneca UK Limited

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