

Product Name: AR-C 118925XX

Catalog No.: 4890

Batch No.: 8

CAS Number: 216657-60-2

IUPAC Name: 5-[[5-(2,8-Dimethyl-5*H*-dibenzo[*a,d*]cyclohepten-5-yl)-3,4-dihydro-2-oxo-4-thioxo-1(2*H*)-pyrimidinyl]methyl]-*N*-2*H*-tetrazol-5-yl-2-furancarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₂₃N₇O₃S.¾H₂O

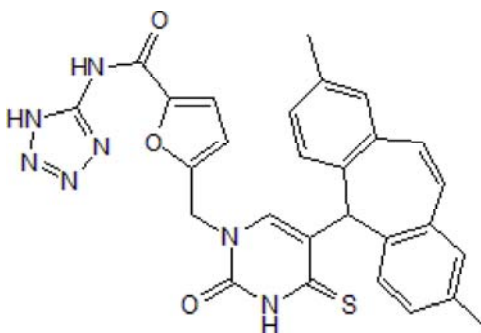
Batch Molecular Weight: 551.1

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	61.02	4.48	17.79
Found	60.93	4.4	17.82

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Description:

AR-C 118925XX is a potent, selective, competitive and reversible P2Y₂ receptor antagonist (pA₂ = 8.43). Inactive against a panel of 37 other receptors at a concentration of 10 μM. AR-C 118925XX inhibits ATP-γS-induced mucin secretion in bronchial epithelial cells (IC₅₀ = 1 μM). Inhibits P2Y₂ receptor-induced β-arrestin translocation in vitro (pA₂ = 37.2-51.3 nM).

Physical and Chemical Properties:

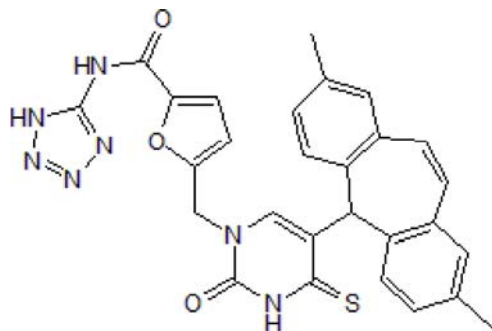
Batch Molecular Formula: C₂₈H₂₃N₇O₃S.¼H₂O

Batch Molecular Weight: 551.1

Physical Appearance: Yellow solid

Minimum Purity: ≥97%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

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.

References:

Muoboghare et al (2019) Characterisation of P2Y₂ receptors in human vascular endothelial cells using AR-C118925XX, a competitive and selective P2Y₂ antagonist. *Br.J.Pharmacol.* **176** 2894. PMID: 31116875.

Rafehi et al (2017) Synthesis, characterization, and in vitro evaluation of the selective P2Y₂ receptor antagonist AR-C118925. *Purinergic.Signal.* **13** 89. PMID: 27766552.

Kemp et al (2004) Nucleotide-mediated mucin secretion from differentiated human bronchial epithelial cells. *Am.J.Respir.Cell Mol.Biol.* **31** 446. PMID: 15231488.

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