

Product Name: FITM

Catalog No.: 6859

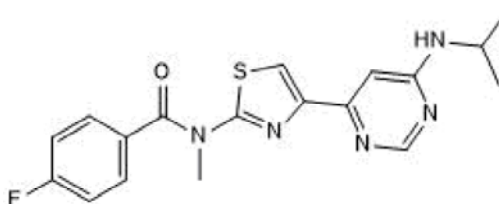
Batch No.: 1

CAS Number: 932737-65-0

IUPAC Name: 4-Fluoro-*N*-[4-[6-(isopropylamino)pyrimidin-4-yl]-1,3-thiazol-2-yl]-*N*-methylbenzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₁₈FN₅OS
Batch Molecular Weight: 371.43
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.3% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.21	4.88	18.86
Found	58.21	4.88	18.68

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

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Description:

Potent and selective negative allosteric modulator of mGlu₁ receptors (IC₅₀ = 5.1 nM). Displays >1300-fold selectivity for mGlu₁ over other metabotropic glutamate receptors (IC₅₀ values are 7 μM and >10 μM for mGlu₅ and mGlu₂ or mGlu₈, respectively). Antagonizes methamphetamine-induced locomotion in mice.

Physical and Chemical Properties:

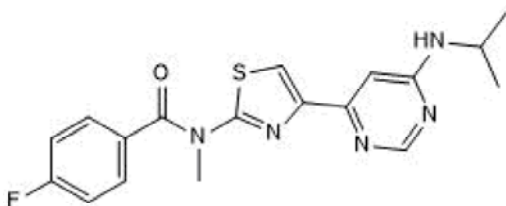
Batch Molecular Formula: C₁₈H₁₈FN₅OS

Batch Molecular Weight: 371.43

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 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:

Wu et al (2014) Structure of a class C GPCR metabotropic glutamate receptor 1 bound to an allosteric modulator. *Science*. **344** 58. PMID: 24603153.

Satoh et al (2009) Discovery and *in vitro* and *in vivo* profiles of 4-fluoro-*N*-[4-[6-(isopropylamino)pyrimidin-4-yl]-1,3-thiazol-2-yl]-*N*-methylbenzamide as novel class of an orally active metabotropic glutamate receptor 1 (mGluR₁) antagonist. *Bioorg.Med.Chem.Lett.* **19** 5464. PMID: 19674894.

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