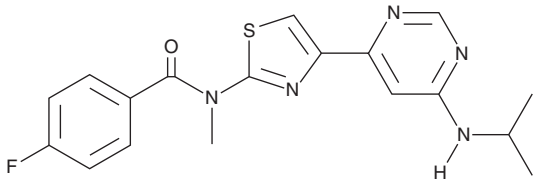
PRODUCT INFORMATION

FITM

Item No. 29219

CAS Registry No.:	932737-65-0
Formal Name:	4-fluoro-N-methyl-N-[4-[6-[(1-methylethyl)amino]-4-pyrimidinyl]-2-thiazolyl]-benzamide
MF:	$C_{18}H_{18}FN_5OS$
FW:	371.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 226, 260 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

FITM is supplied as a crystalline solid. A stock solution may be made by dissolving the FITM in the solvent of choice, which should be purged with an inert gas. FITM is soluble in organic solvents such as ethanol and DMSO. The solubility of FITM in these solvents is approximately 20 and 100 mM, respectively.

Description

FITM is an antagonist of metabotropic glutamate receptor 1 (mGluR1; IC_{50} = 5.1 nM for the human receptor).[1] It is selective for mGluR1 over mGluR2, mGluR5, and mGluR8 (IC_{50}s = >10, 7, and >10 µM, respectively). FITM (0.3 mg/kg) decreases methamphetamine-induced hyperlocomotion in mice and reverses disruptions in prepulse inhibition induced by methamphetamine and ketamine in rats when administered at a dose of 1 mg/kg.

Reference

1. Satoh, A., Nagatomi, Y., Hirata, Y., *et al.* 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(18)**, 5464-5468 (2009).

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