Print Date: Dec 14th 2011

Certificate of Analysis

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Product Name: LY 2087101 **Catalog No.: 4141** **Batch No.: 1**

CAS Number: 913186-74-0

IUPAC Name: [2-[(4-Fluorophenyl)amino]-4-methyl-5-thiazolyl]-3-thienylmethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{11}FN_2OS_2$

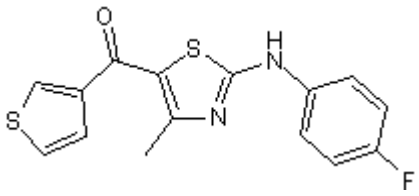
Batch Molecular Weight: 318.39

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM
ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Pentane/Ethyl Acetate 4:1)

HPLC: Shows 99.2% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	56.59	3.48	8.8
Found	56.45	3.43	8.93

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

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USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373
www.RnDSystems.com

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Description:

Allosteric potentiator of α7, α4β2 and α4β4 nAChRs; displays selectivity against α3β4 nAChRs. Thought to potentiate agonist-evoked α7 responses by binding within the nAChR transmembrane region.

Physical and Chemical Properties:

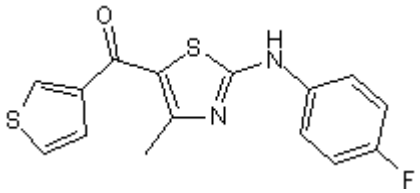
Batch Molecular Formula: $C_{15}H_{11}FN_2OS_2$

Batch Molecular Weight: 318.39

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Useage Info:

DMSO to 100 mM
ethanol to 10 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:

Broad *et al* (2006) Identification and pharmacological profile of a new class of selective nicotinic acetylcholine receptor potentiators. J.Pharmacol.Exp.Ther. ***318*** 1108. PMID: 16738207.

Young *et al* (2008) Potentiation of α7 nicotinic acetylcholine receptors via an allosteric transmembrane site. Proc.Natl.Acad.Sci. ***105*** 14686.