

Certificate of Analysis

Product Name: A 582941

Catalog No.: 4341

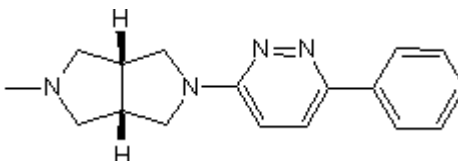
Batch No.: 1

CAS Number: 848591-90-2

IUPAC Name: Octahydro-2-methyl-5-(6-phenyl-3-pyridazinyl)-pyrrolo[3,4-c]pyrrole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₀N₄·½H₂O
Batch Molecular Weight: 289.38
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 1eq. HCl to 50 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Dichloromethane:Methanol [95:5])
HPLC: Shows 98% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.56	7.31	19.36
Found	70.21	6.97	19.06

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

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Description:

Selective $\alpha 7$ nAChR partial agonist; exhibits high affinity for both rat and human $\alpha 7$ receptors (K_i values are 10.8 and 16.7 nM respectively). Displays ~15-fold selectivity for $\alpha 7$ over 5-HT₃ receptors ($K_i = 150$ nM for 5-HT₃).

Physical and Chemical Properties:

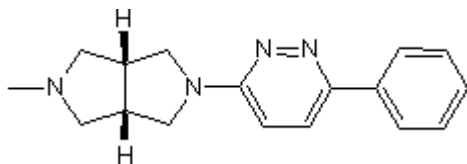
Batch Molecular Formula: C₁₇H₂₀N₄·½H₂O

Batch Molecular Weight: 289.38

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

DMSO to 100 mM

1eq. HCl to 50 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:

Anderson et al (2008) [³H]A-585539 [(1S,4S)-2,2-dimethyl-5-(6-phenylpyridazin-3-yl)-5-aza-2-azoniabicyclo[2.2.1]heptane], a novel high-affinity $\alpha 7$ neuronal nicotinic receptor agonist: radioligand binding characterization to rat and human brain. *J.Pharmacol.Exp.Ther.* **324** 179. PMID: 17959745.

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