

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: ACPT-II Catalog No.: 1112 Batch No.: 1

CAS Number: 195209-04-2

IUPAC Name: (1R,3R,4S)-1-Aminocyclopentane-1,3,4-tricarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_8H_{11}NO_6.H_2O$ Batch Molecular Weight: 235.1952

Physical Appearance: White crystalline solid

Solubility: DMSO to 5 mM

1.4 eq. NaOH to 100 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:

L MVI

2. ANALYTICAL DATA

TLC: $R_f = 0.15$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point:

Between 295 - 300°C(Dec)

1H NMR:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 40.85 5.57 5.95 Found 40.54 5.57 5.89



Product Information

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Description:

Competitive metabotropic receptor antagonist (K_{B} values are 115, 88 and 77 μM at mGlu_{1a}, mGlu₂ and mGlu_{4a} respectively).

Physical and Chemical Properties:

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Physical Appearance: White crystalline solid

Batch Molecular Structure:

Storage: Desiccate at -20°C

Solubility & Usage Info:

DMSO to 5 mM

1.4 eq. NaOH 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:

Acher et al (1997) Synthesis and pharmacological characterization of aminocyclopentanetricarboxylic acids: new tools to discriminate between metabotropic glutamate receptor subtypes. J.Med.Chem. 40 3119. PMID: 9301676.

Bessis et al (2002) Closure of the venus flytrap model of mGlu8 receptor and the activation process: Insights from mutations converting antagonists into agonists. Proc.Natl.Acad.Sci.U.S.A. 99 11097. PMID: 12151600.

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