

Certificate of Analysis

www.tocris.com

Product Name: (RS)-APICA

Catalog No.: 1073

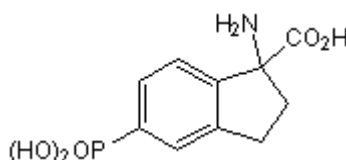
Batch No.: 4

CAS Number: 170847-18-4

IUPAC Name: (RS)-1-Amino-5-phosphonoindan-1-carboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₁₂NO₅P.H₂O
Batch Molecular Weight: 275.2
Physical Appearance: White solid
Solubility: 1.1eq. NaOH to 100 mM
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.38 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: At 297°C
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen	
Theoretical	43.61	5.13	5.09	0 0 0
Found	43.61	5.09	4.96	0 0 0

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

Product Information

www.tocris.com

Product Name: (RS)-APICA

Catalog No.: 1073

Batch No.: 4

CAS Number: 170847-18-4

IUPAC Name: (RS)-1-Amino-5-phosphonoindan-1-carboxylic acid

Description:

Rigidified analog of MPPG (Cat. No. 0853); selective group II metabotropic glutamate receptor antagonist ($IC_{50} = 30 \mu M$) with no significant effect on group I and III mGlu receptors at concentrations up to 1 mM. Increases extracellular glutamate concentrations and possesses unusual inverse agonist-like action.

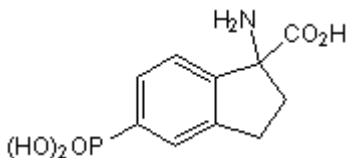
Physical and Chemical Properties:

Batch Molecular Formula: $C_{10}H_{12}NO_5P \cdot H_2O$

Batch Molecular Weight: 275.2

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

1.1eq. 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:

Ma et al (1997) Synthesis and biological activity of cyclic analogues of MPPG and MCPG as metabotropic glutamate receptor antagonists. *Bioorg.Med.Chem.Lett.* **7** 1195.

Krenz et al (2000) Group I, II and III mGluR compounds affect rhythm generation in the gastric circuit of the crustacean stomatogastric ganglion. *J.Neurophysiol.* **83** 1188. PMID: 10712449.

Xi et al (2002) Group II metabotropic glutamate receptors modulate extracellular glutamate in the nucleus accumbens. *J.Pharmacol.Exp.Ther.* **300** 162. PMID: 11752112.

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

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel: +1 612 379 2956