

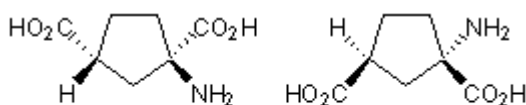
Certificate of Analysis

Product Name: *cis*-ACPD
CAS Number: 477331-06-9
IUPAC Name: (±)-1-Aminocyclopentane-*cis*-1,3-dicarboxylic acid

Catalog No.: 0186 **Batch No.:** 3

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇H₁₁NO₄·H₂O
Batch Molecular Weight: 191.18
Physical Appearance: White solid
Solubility: 1eq. NaOH to 100 mM
Storage: Store at RT
Batch Molecular Structure:



(1:1 mixture of enantiomers)

2. ANALYTICAL DATA

¹H NMR: Consistent with structure

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

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Description:

1:1 mixture of (1R,3R)- and (1S,3S)-ACPD. Potent NMDA receptor agonist and selective group II mGluR agonist (EC₅₀ values are 13, 50, >300 and >300 μM at mGluR₂, mGluR₄, mGluR₁ and mGluR₅ respectively). Exhibits proconvulsant activity in vivo. (±)-*trans*-ACPD (Cat. No. 0187) and (1S,3R)-ACPD (Cat. No. 0284) also available.

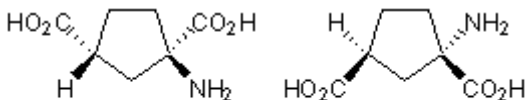
Physical and Chemical Properties:

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References:

Schoepp et al (1991) In vitro and in vivo pharmacology of *trans*- and *cis*-(±)-1-amino-1,3-cyclopentanedicarboxylic acid: Dissociation of metabotropic and ionotropic excitatory amino acid receptor effects. *J.Neurochem.* **56** 1789. PMID: 1849553.

Sunter et al (1991) Actions of the four isomers of 1-aminocyclopentane-1,3-dicarboxylate (ACPD) in the hemisectioned spinal cord of the neonatal rat. *Br.J.Pharmacol.* **104** 337P.

Conti et al (2002) Synthesis and pharmacology of 3-hydroxy-Δ²-isoxazoline-cyclopentane analogues of glutamic acid. *Farmaco* **57** 889. PMID: 12484537.

Storage: Store at RT

Solubility & Usage Info:

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.

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