

Product Name: (±)-*trans*-ACPD

Catalog No.: 0187

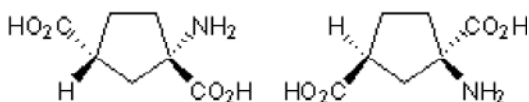
Batch No.: 22

CAS Number: 67684-64-4

IUPAC Name: (±)-1-Aminocyclopentane-*trans*-1,3-dicarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇H₁₁NO₄.H₂O
Batch Molecular Weight: 191.19
Physical Appearance: White solid
Solubility: water to 5 mM with gentle warming
 1eq. NaOH to 50 mM
Storage: Store at RT
Batch Molecular Structure:



(1:1 mixture of enantiomers)

2. ANALYTICAL DATA

TLC: R_f = 0.13 (Pyridine:Acetic acid:Water:Butanol [1:2])
HPLC: Shows 99.3% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	43.98	6.85	7.33
Found	43.73	6.72	7.25

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

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Description:

(±)-*trans*-ACPD is an equimolecular mixture of (1S,3R)- and (1R,3S)-ACPD. Selective agonist for metabotropic glutamate receptors; active at both group I and group II mGlu receptors (EC₅₀ values are 2, 15, 23 and ~800 μM at mGluR₂, mGluR₁, mGluR₅ and mGluR₄ respectively). (1S,3R)-ACPD and *cis*-ACPD also available.

Physical and Chemical Properties:

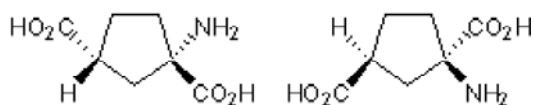
Batch Molecular Formula: C₇H₁₁NO₄·H₂O

Batch Molecular Weight: 191.19

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



(1:1 mixture of enantiomers)

Storage: Store at RT

Solubility & Usage Info:

water to 5 mM with gentle warming
1eq. NaOH 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:

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

Knopfel et al (1995) Metabotropic glutamate receptors: novel targets for drug development. *J. Med. Chem.* **38** 1417. PMID: 7738999.

Pin and Duvoisin (1995) The metabotropic glutamate receptors: structure and functions. *Neuropharmacology* **34** 1. PMID: 7623957.

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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