

Certificate of Analysis

www.tocris.com

Product Name: TACA

Catalog No.: 0181

Batch No.: 7

CAS Number: 38090-53-8

IUPAC Name: *trans*-4-Aminocrotonic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₇NO₂
Batch Molecular Weight: 101.1
Physical Appearance: White solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: Between 175 - 177°C
¹H NMR: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	47.52	6.98	13.85
Found	47.14	7.03	13.71

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

Product Name: TACA

Catalog No.: 0181

Batch No.: 7

CAS Number: 38090-53-8

IUPAC Name: *trans*-4-Aminocrotonic acid

Description:

The *trans*-isomer of CACA. Potent GABA_A agonist, GABA uptake inhibitor and substrate for GABA-T. Also GABA_A-p agonist.

Physical and Chemical Properties:

Batch Molecular Formula: C₄H₇NO₂

Batch Molecular Weight: 101.1

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water 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:

Johnston et al (1975) *cis* and *trans*-4-Aminocrotonic acid as GABA analogues of restricted conformation. *J.Neurochem.* **24** 157. PMID: 234147.

Johnston et al (1996) GABA_C receptors: relatively simple transmitter-gated ion channels. *TIPS* **17** 319. PMID: 8885697.

Chebib et al (1997) Analogues of γ -aminobutyric acid (GABA) and *trans*-4-aminocrotonic acid (TACA) substituted in the 2 position as GABA_C receptor antagonists. *Br.J.Pharmacol.* **122** 1551. PMID: 9422798.

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