



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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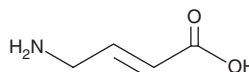
# PRODUCT INFORMATION



## TACA

Item No. 35217

**CAS Registry No.:** 38090-53-8  
**Formal Name:** 4-amino-2E-butenoic acid  
**Synonym:** *trans*-4-Aminocrotonic Acid  
**MF:** C<sub>4</sub>H<sub>7</sub>NO<sub>2</sub>  
**FW:** 101.1  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



**Special Conditions:** Light and temperature sensitive

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

TACA is supplied as a solid. A stock solution may be made by dissolving the TACA in the solvent of choice, which should be purged with an inert gas. TACA is slightly soluble in methanol.

TACA is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

TACA is an agonist of the  $\rho 1$  subunit-containing homomeric GABA<sub>A</sub> receptor, previously known as the GABA<sub>C</sub> receptor.<sup>1,2</sup> It binds to homomeric GABA<sub>A</sub> receptors ( $K_i = 0.36 \mu\text{M}$ ) and induces chloride currents in *X. laevis* oocytes expressing the human receptor ( $\text{EC}_{50} = 0.53 \mu\text{M}$ ).<sup>1</sup> TACA (20 mg/kg) inhibits anxiolytic-like activity induced by the flavonoid quercetin (Item No. 10005169) in mice.<sup>3</sup>

### References

1. Chang, Y., Covey, D.F., and Weiss, D.S. Correlation of the apparent affinities and efficacies of  $\gamma$ -aminobutyric acid<sub>C</sub> receptor agonists. *Mol. Pharmacol.* **58(6)**, 1375-1380 (2000).
2. Chebib, M., Vandenberg, R.J., and Johnston, G.A.R. Analogues of  $\gamma$ -aminobutyric acid (GABA) and *trans*-4-aminocrotonic acid (TACA) substituted in the 2 position as GABA<sub>C</sub> receptor antagonists. *Br. J. Pharmacol.* **122(8)**, 1551-1560 (1997).
3. Jung, J.W. and Lee, S. Anxiolytic effects of quercetin: Involvement of GABAergic system. *J. Life Sci.* **24(3)**, 290-296 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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