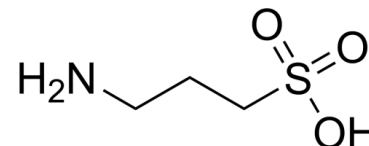


## Data Sheet

<b>Product Name:</b>	Tramiprosate
<b>Cat. No.:</b>	CS-5741
<b>CAS No.:</b>	3687-18-1
<b>Molecular Formula:</b>	C <sub>3</sub> H <sub>9</sub> NO <sub>3</sub> S
<b>Molecular Weight:</b>	139.17
<b>Target:</b>	Amyloid-β
<b>Pathway:</b>	Neuronal Signaling
<b>Solubility:</b>	H <sub>2</sub> O : 20 mg/mL (ultrasonic); DMSO : 1 mg/mL (ultrasonic)



### BIOLOGICAL ACTIVITY:

Tramiprosate (Homotaurine), an orally active and brain-penetrant natural amino acid found in various species of red marine algae. Tramiprosate binds to soluble Aβ and maintains Aβ in a non-fibrillar form. Tramiprosate is also a GABA analog and possess neuroprotection, anticonvulsion and antihypertension effects<sup>[1][2][3]</sup>. *In Vitro*: Tramiprosate (200 μg/mL, 40 μg/mL, 8 μg/mL and 1.6 μg/mL; 1 hours) significantly attenuates oxygen/glucose deprivation (OGD)- or NMDA-induced injury in NGF-differentiated PC12 cells and primary cortical neurons. Tramiprosate decreases the intensity of the association between nNOS and PSD95, and Tramiprosate also inhibits the translocation of nNOS from the cytosol to the membrane<sup>[1]</sup>. *In Vivo*: Tramiprosate (6.25-50 mg/kg; intraperitoneal injection; once) treatment dose-dependently reduces the infarct volume after MCAO. Tramiprosate (50 mg/kg) treatment shows a significant neurological functional recovery<sup>[1]</sup>.

### References:

- [1]. Wu S et al. Tramiprosate protects neurons against ischemic stroke by disrupting the interaction between PSD95 and nNOS. *Neuropharmacology*. 2014 Aug;83:107-17.
- [2]. Francine Gervais, et al. Targeting soluble Abeta peptide with Tramiprosate for the treatment of brain amyloidosis. *Neurobiol Aging*. 2007 Apr;28(4):537-47.
- [3]. R G Fariello, et al. Homotaurine (3 aminopropanesulfonic acid; 3APS) protects from the convulsant and cytotoxic effect of systemically administered kainic acid. *Neurology*. 1982 Mar;32(3):241-5.

### CAIndexNames:

1-Propanesulfonic acid, 3-amino-

### SMILES:

NCCCC(=O)(O)=O

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA