# **Product** Data Sheet

# Acamprosate-d<sub>3</sub> calcium

Cat. No.: HY-17030S CAS No.: 1225580-94-8 Molecular Formula: C<sub>E</sub>H<sub>2</sub>D<sub>3</sub>CaNO<sub>4</sub>S<sup>+</sup>

**Molecular Weight:** 203.26

Target: **GABA Receptor** 

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

4°C, sealed storage, away from moisture Storage:

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## **BIOLOGICAL ACTIVITY**

Description	Acamprosate-d <sub>3</sub> (calcium) is the deuterium labeled Acamprosate calcium. Acamprosate calcium is a GABA receptor agonist and modulator of glutamatergic systems[1][2].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Preuss UW. Commentary on the study: impact of depressive symptoms on future alcohol use in patients with co-occurring bipolar disorder and alcohol dependence: a prospective analysis in an 8-week randomized controlled trial of acamprosate (Prisciandaro et al.). Alcohol Clin Exp Res. 2012 Jun; 36(6):967-9. doi: 10.1111/j.1530-0277.2012.01827.x.

[3]. Witkiewitz K, Saville K, Hamreus K.Acamprosate for treatment of alcohol dependence: mechanisms, efficacy, and clinical utility. Ther Clin Risk Manag. 2012;8:45-53.

[4]. Gahr M, et al. Relapse prevention in alcohol dependence: acamprosate and naltrexone as a combined pharmacological strategy. Nervenarzt. 2012 Aug 15.

[5]. Palucha-Poniewiera A, Pilc A.Involvement of mGlu5 and NMDA receptors in the antidepressant-like effect of acamprosate in the tail suspension test. Prog Neuropsychopharmacol Biol Psychiatry. 2012 Oct 1;39(1):102-6.

[6]. Hinton DJ, et al. Ethanol withdrawal-induced brain metabolites and the pharmacological effects of acamprosate in mice lacking ENT1. Neuropharmacology. 2012 Jun;62(8):2480-8.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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

Page 1 of 1

www.MedChemExpress.com

**Screening Libraries Proteins** 

Inhibitors