

Product Data Sheet

Product Name: Acamprosate calcium

Cat. No.: GC14916

Chemical Properties

Cas. No. 77337-73-6

Chemical Name calcium;3-acetamidopropane-1-sulfonate

SMILES CC(=O)NCCCS(=O)(=O)[O-].CC(=O)NCCCS(=O)(=O)[O-].[Ca+2]

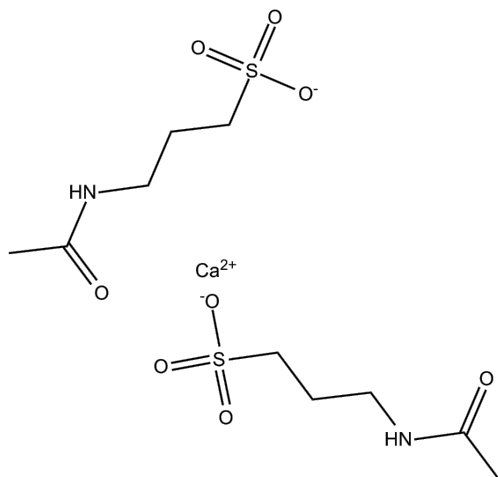
Formula $C_{10}H_{20}CaN_2O_8S_2$ M.Wt 400.48

Solubility ≥ 40 mg/mL in Water Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Acamprosate calcium (Campral EC) is a GABA receptor agonist and modulator of glutamatergic systems; reduces alcohol consumption in animal models of alcohol addiction. IC_{50} value: Target: GABA receptor. Acamprosate, or N-acetyl homotaurine, is an N-methyl-D-aspartate receptor

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

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modulator approved by the Food and Drug Administration (FDA) as a pharmacological treatment for alcohol dependence. Acamprosate has low bioavailability, but also has an excellent tolerability and safety profile. In comparison with naltrexone and disulfiram, which are the other FDA-approved treatments for alcohol dependence, acamprosate is unique in that it is not metabolized by the liver and is also not impacted by alcohol use, so can be administered to patients with hepatitis or liver disease (a common comorbid condition among individuals with alcohol dependence) and to patients who continue drinking alcohol.

References:

- [1]. 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.
- [2]. 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.
- [3]. Gahr M, et al. Relapse prevention in alcohol dependence: acamprosate and naltrexone as a combined pharmacological strategy. *Nervenarzt*. 2012 Aug 15.
- [4]. 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.
- [5]. 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.

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