

Product Data Sheet

Product Name: Alloepipregnanolone

Cat. No.: GC33807

Chemical Properties

Cas. No. 516-55-2

SMILES CC([C@H]1CC[C@@]2([H])[C@]3([H])CC[C@@]4([H])C[C@@H](O)CC[C@]4(C)[C@@]3([H])CC[C@]12C)=O

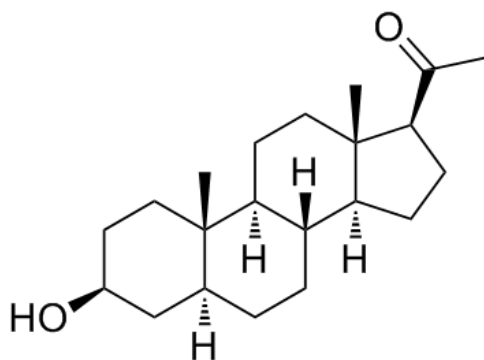
Formula $C_{21}H_{34}O_2$ M.Wt 318.49

Solubility Ethanol: 10 mg/mL (31.40 mM); Storage Store at -20°C
DMSO: 3.33 mg/mL (10.46 mM)

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



Protocol

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Animal experiment: Mice[1] Male Swiss mice are pretreated with Alloepipregnanolone (isopregnanolone: 0.05, 0.10 or 0.20 mg/kg) 30 min before administration of ethanol (1.5 g/kg). Twenty-four hours later, all animals tested using the plus-maze apparatus. The first experiment defines the doses of ethanol that does or does not induce rapid tolerance to the anxiolytic effect of ethanol. In the second, the influence of pretreatment of mice with Alloepipregnanolone (0.05, 0.10 or 0.20 mg/kg) on rapid tolerance to ethanol (1.5 g/kg) is studied[1].

References:

[1]. Debatin T, et al. Effect of isopregnanolone on rapid tolerance to the anxiolytic effect of ethanol. Rev Bras Psiquiatr. 2006 Mar;28(1):18-23.

Background

Alloepipregnanolone, a pregnane with anesthetic, hypnotic, and sedative properties, interferes with the development of rapid tolerance to the anxiolytic effect of ethanol.

On day 2, pretreatment with a 0.20 mg/kg dose of Alloepipregnanolone blocks the development of rapid tolerance to the anxiolytic effect of ethanol. However, there is a significant decrease in the anxiolytic effect in the control groups that received ethanol on both days (EE), suggesting that the 1.5 g/kg dose of ethanol results in rapid tolerance. The post hoc analysis confirms that the 0.20 mg/kg pretreatment with Alloepipregnanolone blocks the rapid tolerance compared to the control groups, although the 0.10 mg/kg dose only partially blocks the development of such tolerance. However, the 0.05 mg/kg dose has no effect on the development of rapid tolerance to ethanol[1].

[1]. Debatin T, et al. Effect of isopregnanolone on rapid tolerance to the anxiolytic effect of ethanol. Rev Bras Psiquiatr. 2006 Mar;28(1):18-23.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA