
Product Data Sheet

Product Name: Pizotifen Malate

Cat. No.: GC13478

Chemical Properties

Cas. No. 5189-11-7

Chemical Name 4-(4,5-dihydrobenzo[1,2]cyclohepta[3,4-b]thiophen-10-ylidene)-1-methylpiperidine;2-hydroxybutanedioic acid

SMILES CN1CCC(=C2C3=C(CCC4=CC=CC=C42)SC=C3)CC1.C(C(C(=O)O)O)C(=O)OFormula C₂₃H₂₇NO₅S M.Wt 429.53

Solubility ≥ 21.48mg/mL in DMSO 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 **Protocol**

Animal experiment: Mice[3]Pizotifen malate is administered orally to three groups of Swiss mice in doses of 0.24, 0.6 and 1.2 mg/kg from day 4 to day 16 of gestation. The control group is treated with distilled water. On day 19 of gestation, the mice are sacrificed and cytogenetical examination and uterine content (number of live, abnormal and dead fetuses as well as the number of implantations, resorptions) are determined. The live fetuses were inspected for external, visceral and skeletal malformations[3].

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

References:

- [1]. Mylecharane EJ, et al. 5-HT₂ receptor antagonists and migraine therapy. J Neurol. 1991;238 Suppl 1:S45-52.
- [2]. Lin OA, et al. The antidepressant 5-HT_{2A} receptor antagonists pizotifen and cyproheptadine inhibit serotonin-enhanced platelet function. PLoS One. 2014 Jan 23;9(1):e87026.
- [3]. Ujházy E, et al. Teratological and cytogenetical evaluation of two antihistamines (pipethiadene and pizotifen maleate) in mice. Agents Actions. 1988 Apr;23(3-4):376-8.

Background

Pizotifen (malate) (BC-105 (malate)) is a potent 5-HT₂ receptor antagonist, with a high affinity for 5-HT_{1C} binding site.

Pizotifen is a potent 5-HT₂ receptor antagonist, with a high affinity for 5-HT_{1C} binding site[1]. Pizotifen is an antidepressant 5-HT_{2A} receptor antagonist and has the capacity to

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

inhibit serotonin-enhanced ADP-induced platelet aggregation[2].

The weights of the fetuses are significantly reduced by all administered doses of Pipethiadene and Pizotifen malate; the weights of the placentas are significantly reduced after 0.6 and 1.2 mg/kg Pipethiadene and only after the middle dose of Pizotifen malate. The means of the implantations, live, dead fetuses, resorptions and the occurrence of external, skeletal and visceral anomalies do not differ from the control group. The number of chromosome aberrations in the bone marrow cells of treated mice does not differ significantly from the negative control group. The micronucleus test reveals no elevation in the frequency of micronuclei as compared to the control group. After the two higher doses of both Pipethiadene and Pizotifen maleate, the mitotic indices are lower than in the control group[3].

References:

- [1]. Mylecharane EJ, et al. 5-HT₂ receptor antagonists and migraine therapy. J Neurol. 1991;238 Suppl 1:S45-52.
- [2]. Lin OA, et al. The antidepressant 5-HT_{2A} receptor antagonists pizotifen and cyproheptadine inhibit serotonin-enhanced platelet function. PLoS One. 2014 Jan 23;9(1):e87026.
- [3]. Ujházy E, et al. Teratological and cytogenetical evaluation of two antihistamines (pipethiadene and pizotifen maleate) in mice. Agents Actions. 1988 Apr;23(3-4):376-8.

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