
Product Data Sheet

Product Name: Monoammoniumglycyrrhizinate

Cat. No.: GN10315

Chemical Properties

Cas. No. 53956-04-0

Chemical Name Glycyrrhizin Monoammonium Salt;Glycyrrhizic acid monoammonium salt trihydrate;Glycamil trihydrate

SMILES CC1(C2CCC3(C(C2(CCC1OC4C(C(C(C(O4)C(=O)O)O)O)OC5C(C(C(C(O5)C(=O)O)O)O)O)C(=O)C=C6C3(CCC7(C6CC(CC7)C)C(=O)O)C)C)C.NFormula $C_{42}H_{62}O_{16} \cdot H_3N$

M.Wt 839.97

Solubility DMF: 2 mg/mL,DMSO: 20 mg/mL,PBS (pH 7.2): 1 mg/mL

Storage

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[1]In this study, BALB/c mice (male, 6-8weeks old, and 20-25 g) are used. Mice are randomly divided into five groups: control group, LPS group, and LPS + Monoammonium glycyrrhizinate (MAG: 3, 10, and 30mg/kg) groups. Each group contains eight mice. Mice are anesthetized with intraperitoneal injection of sodium pentobarbital (50mg/kg). Before inducing acute lung injury, the mice are given intraperitoneal injection with MAG (3, 10, and 30mg/kg). One hour later, LPS (5mg/kg) is instilled intratracheally to induce acute lung injury. Normal mice are given PBS[1]. Rats[2]Male Wistar rats (180-220 g) are used. Rats are randomly divided into four groups, i.e., control group, RIF and INH group, MAG low-dose group, and MAG high-dose group, each group has 15 rats. Rats in the RIF and INH group receive RIF (60 mg/kg) and INH (60 mg/kg) by gavage administration once daily; rats in MAG groups are pretreated with MAG at the doses of 45 or 90 mg/kg, RIF (60 mg/kg) and INH (60 mg/kg) are given 3 h after MAG administration; rats in the control group are treated with saline. To evaluate the dynamic effect of drugs, rats in each group are sacrificed on 7, 14, and 21 d after drug administration[2].

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

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References:

[1]. Huang X, et al.
Anti-Inflammatory
Effects of
Monoammonium
Glycyrrhizinate on
Lipopolysaccharide-
Induced Acute Lung
Injury in Mice through
Regulating Nuclear
Factor-Kappa B
Signaling Pathway.
Evid Based
Complement Alternat
Med.
2015;2015:272474.

[2]. Zhou L, et al.
Monoammonium
glycyrrhizinate
protects rifampicin-
and isoniazid-induced
hepatotoxicity via
regulating the
expression of
transporter Mrp2,
Ntcp, and Oatp1a4 in
liver. Pharm Biol.
2016;54(6):931-7.

Background

Monoammonium glycyrrhizinate hydrate has various pharmacological actions such as anti-inflammatory, antiallergic, antigastriculcer, and antihepatitis activities.

The increase of the lung W/D weight ratios is significantly reduced by high and medium dose of MAG (10 and 30mg/kg) administration. Pretreatment with MAG (10 and 30mg/kg) efficiently reduces the production of TNF-

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