# Glibornuride

**Cat. No.:** HY-17451

**CAS No.:** 26944-48-9

**Molecular Formula:** $C_{18}H_{26}N_2O_4S$

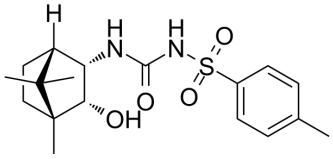
**Molecular Weight:** 366.48

**Target:** Potassium Channel

**Pathway:** Membrane Transporter/Ion Channel

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| | 4°C | 2 years |
| In solvent | -80°C | 6 months |
| | -20°C | 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 250 mg/mL (682.17 mM; Need ultrasonic)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.7287 mL | 13.6433 mL | 27.2866 mL |
| 5 mM | 0.5457 mL | 2.7287 mL | 5.4573 mL |
| 10 mM | 0.2729 mL | 1.3643 mL | 2.7287 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.68 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.68 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Glibornuride is a blocker of ATP-sensitive $K^+$ channels ($K_{ATP}$ channel) with a $pK_i$ of 5.75[1]. Antidiabetic agent[2].

**$IC_{50}$ & Target**

pKi: 5.75 ($K_{ATP}$ channel)[1]

**In Vivo**

Administration of Glibornuride (5 mg/kg; gavage, daily for 28 days) for 28 days causes an increase in body weights in the diabetic groups in Swiss albino rats[2].

Treatment with Glibornuride for 28 days decreases the serum uric acid levels in diabetic rats[2].

Administration of Glibornuride for 28 days, insignificantly increases the liver lipid peroxidation levels in diabetic rats[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|---|---|
| Animal Model: | 6-6.5-month-old male Swiss Albino rats, weighing 150-200 g[2] |
| Dosage: | 5 mg/kg |
| Administration: | Given by gavage, daily for 28 days |
| Result: | Administration for 28 days caused an increase in body weights in the diabetic groups. Treatment for 28 days decreased the serum uric acid levels in diabetic rats. |

## REFERENCES

[1]. Löffler C, et al. Pharmacological characterization of the sulphonylurea receptor in rat isolated aorta. Br J Pharmacol. 1997 Feb;120(3):476-80.

[2]. Ozsoy-Sacan O, et al. Effects of parsley (Petroselinum crispum) extract versus Glibornuride on the liver of streptozotocin-induced diabetic rats. J Ethnopharmacol. 2006 Mar 8;104(1-2):175-81.



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