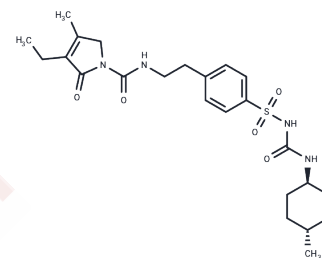


## Glimepiride

## Chemical Properties

CAS No. :	93479-97-1
Formula:	C <sub>24</sub> H <sub>34</sub> N <sub>4</sub> O <sub>5</sub> S
Molecular Weight:	490.62
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Glimepiride (HOE-490) is a long-acting, third-generation sulfonylurea with hypoglycemic activity.
Targets(IC50)	Potassium Channel
In vitro	In both normal and insulin-resistant adipocytes, as well as in myocytes, Glimepiride effectively stimulates glucose transport, and the synthesis of lipids and glycogen. In cardiomyocytes, Glimepiride (IC <sub>50</sub> =6.8 nM) inhibits the pinacidil-activated whole-cell K (ATP) current. Additionally, in HEK 293 cells, Glimepiride (IC <sub>50</sub> =6.2 nM) blocks the K(ATP) channels formed by the co-expression of Kir6.2/SUR2A subunits.
In vivo	Within diabetic rats, Glimepiride has been shown to decrease the incidence of sperm abnormalities, enhance sperm count, and bolster antioxidant capacity.

## Solubility Information

Solubility	DMSO: 16.67 mg/mL (33.98 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0382 mL	10.1912 mL	20.3824 mL
5 mM	0.4076 mL	2.0382 mL	4.0765 mL
10 mM	0.2038 mL	1.0191 mL	2.0382 mL
50 mM	0.0408 mL	0.2038 mL	0.4076 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

Song DK, et al. Br J Pharmacol, 2001, 133(1), 193-199.

Zhan Z T, Liu L, Cheng M Z, et al. The Effects of 6 Common Antidiabetic Drugs on Anti-PD1 Immune Checkpoint Inhibitor in Tumor Treatment. Journal of Immunology Research. 2022

Müller G, et al. Horm Metab Res, 1996, 28(9), 469-487

Lawrence CL, et al. Br J Pharmacol, 2002, 136(5), 746-752.

Rabbani SI, et al. Indian J Exp Biol, 2009, 47(10), 804-810.

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