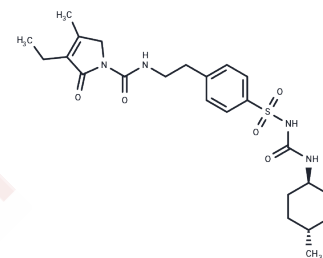


## Glimepiride

## 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
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Glimepiride (HOE-490) is a long-acting, third-generation sulfonylurea with hypoglycemic activity.
Targets(IC <sub>50</sub> )	Beta Amyloid,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: 30 mg/mL (61.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1.5 mg/mL (3.06 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	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

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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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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