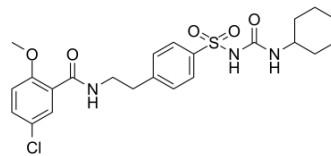


Glibenclamide

Cat. No.:	HY-15206		
CAS No.:	10238-21-8		
Molecular Formula:	C ₂₃ H ₂₈ ClN ₃ O ₅ S		
Molecular Weight:	494		
Target:	Potassium Channel; Autophagy		
Pathway:	Membrane Transporter/Ion Channel; Autophagy		
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 : ≥ 60 mg/mL (121.46 mM)
 H₂O : < 0.1 mg/mL (insoluble)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.0243 mL	10.1215 mL	20.2429 mL
	5 mM	0.4049 mL	2.0243 mL	4.0486 mL
	10 mM	0.2024 mL	1.0121 mL	2.0243 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (5.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Glibenclamide is a selective inhibitor of ATP-sensitive K⁺ channel.

CUSTOMER VALIDATION

- Br J Pharmacol. 2020 May;177(10):2286-2302.

- Pharmacol Res. 2020 Jan 31;153:104679.
- Front Cell Dev Biol. 2020 May.
- Research Square Preprint. 2020 Oct.

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- [2]. Soydan N, Bretzel RG, Fischer B, et al. Reduced capacity of heart rate regulation in response to mild hypoglycemia induced by glibenclamide and physical exercise in type 2 diabetes. *Metabolism.* 2013 Jan 11. pii: S0026-0495(12)00456-8.
- [3]. Sokolovska J, Isajevs S, Sugoka O, et al. Comparison of the Effects of Glibenclamide on Metabolic Parameters, GLUT1 Expression, and Liver Injury in Rats With Severe and Mild Streptozotocin-Induced Diabetes Mellitus. *Medicina (Kaunas).* 2012;48(10):532-43.
- [4]. Gangji AS, Cukierman T, Gerstein HC et al. A systematic review and meta-analysis of hypoglycemia and cardiovascular events: a comparison of glyburide with other secretagogues and with insulin. *Diabetes Care.* 2007 Feb;30(2):389-94.
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Caution: Product has not been fully validated for medical applications. For research use only.

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