

**Catalog # 10-1325**

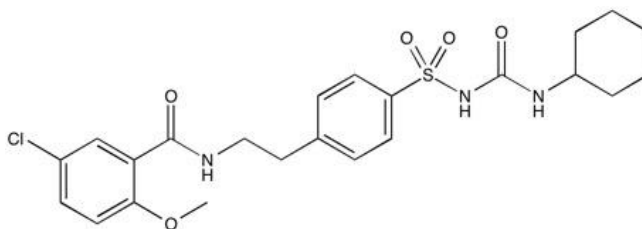
**Glyburide**

CAS# 10238-21-8

Glibenclamide

5-chloro-N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulphonyl]phenyl]ethyl]-2-methoxybenzamide

Lot # X101240



Second generation oral hypoglycemic agent. Acts via ATP-dependent K<sup>+</sup> channel (K<sub>ir</sub>6, K<sub>ATP</sub>) block<sup>1</sup>. Inhibits K<sub>ir</sub>6 currents in the pancreas, causing an increase in intracellular Ca<sup>2+</sup> and insulin secretion. Also inhibits recombinant CFTR Cl<sup>-</sup> channels with an IC<sub>50</sub> of 20 μM<sup>2</sup>. Cell permeable.

- 1) Brogden *et al.* (1979), *Glipizide: a review of its pharmacological properties and therapeutic use*; *Drugs*, **18** 329
- 2) Sheppard and Welsh (1992), *Effect of ATP-sensitive K<sup>+</sup> channel regulators on cystic fibrosis transmembrane conductance regulator chloride currents*; *J. Gen. Physiol.*, **100** 573

**PHYSICAL DATA**

Molecular Weight:	494.01
Molecular Formula:	C <sub>23</sub> H <sub>28</sub> ClN <sub>3</sub> O <sub>5</sub> S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 45 mg/ml) or Ethanol (up to 2 mg/ml, with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**