

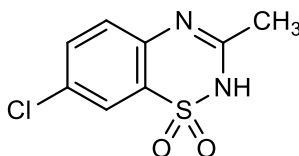
**Catalog # 10-2237**

**Diazoxide**

364-98-7

7-Chloro-3-methyl-2H-1,2,4-benzothiadiazine 1,1-dioxide

Lot # X101434



Activates ATP-dependent K<sup>+</sup> channels<sup>1</sup> via inducing translocation of PKC-epsilon from the cytosol to the mitochondria<sup>2</sup>. Hyperglycemic agent. Induces powerful protective effects against cardiac ischemia via multiple mechanisms.<sup>3</sup> Stimulates mitochondrial ATP synthase activity conferring cardioprotection in a streptozotocin-induced acute diabetes model.<sup>4</sup> Prevents alterations in memory and synaptic plasticity induced by Amyloid-β.<sup>5</sup>

- 1) Trube *et al.* (1986), *Opposite effects of tolbutamide and diazoxide on the ATP-dependent K<sup>+</sup> channel in mouse pancreatic beta-cells.*; Pflugers Arch., **407** 493
- 2) Kim *et al.* (2006), *Diazoxide acts more as a PKC-epsilon activator, and indirectly activates the mitochondrial K(ATP) channel conferring cardioprotection against hypoxic injury*; Br. J. Pharmacol, **149** 1059
- 3) Coetzee (2013), *Multiplicity of effectors of the cardioprotective agent, diazoxide*; Pharmacol. Ther., **140** 167
- 4) Jasova *et al.* (2016), *Stimulation of mitochondrial ATP synthase activity – a new diazoxide-mediated mechanism of cardioprotection*; Physiol. Res., **65 Suppl 1** S119
- 5) Salgado-Puga *et al.* (2017), *Subclinical Doses of ATP-sensitive Potassium channel Modulators Prevent Alterations in Memory and Synaptic Plasticity Induced by Amyloid-β*; J. Alzheimers Dis., **57** 205

**PHYSICAL DATA**

Molecular Weight:	230.67
Molecular Formula:	C <sub>8</sub> H <sub>7</sub> ClN <sub>2</sub> O <sub>2</sub> S
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO 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.**