

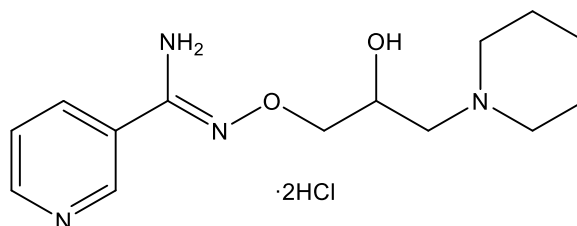
Catalog # 10-1373

BGP-15

CAS# 66611-37-8

N-[2-Hydroxy-3-(1-piperidinyl)propoxy]-3-pyridinecarboximidamide, dihydrochloride

Lot # X104566



BGP-15 is a cellular protectant operating by several mechanisms. It is an insulin sensitizer¹, HSP72 activator², PARP inhibitor and ROS and lipid peroxidation reducer³. It protects mitochondria in acetaminophen-induced liver injury⁴ as well as LPS-induced destabilization⁵ and activates mitochondrial fusion⁶. Displays protective effects in heart failure⁷ and traumatic brain injury⁸ in animal models.

- 1) Peto et al. (2020), *Pharmacological Overview of the BGP-15 Chemical Agent as a New Drug Candidate for the Treatment of Symptoms of Metabolic Syndrome*; *Molecules* **25** 429
- 2) Henstridge et al. (2014), *Activating HSP72 in rodent skeletal muscle increases mitochondrial number and oxidative capacity and decreases insulin resistance*; *Diabetes* **63** 1881
- 3) Szabados et al. (2000), *BGP-15, a nicotinic amidoxime derivative protecting heart from ischemia reperfusion injury through modulation of poly(ADP-ribose) polymerase*; *Biochem. Pharmacol.* **59** 937
- 4) Sarnyai et al. (2020), *BGP-15 Protects Mitochondria in Acute Acetaminophen Overdose Induced Liver Injury*; *Pathol. Oncol. Res.* **26** 1797
- 5) Sumegi et al. (2017), *BGP-15 Protects against Oxidative Stress- or Lipopolysaccharide-Induced Mitochondrial Destabilization and Reduces Mitochondrial Production of Reactive Oxygen Species*; *PLoS One* **12** e0169372
- 6) Szabo et al. (2018), *Activation of mitochondrial fusion provides a new treatment for mitochondria-related diseases*; *Biochem. Pharmacol.* **150** 86
- 7) Sapra et al. (2014), *The small-molecule BGP-15 protects against heart failure and atrial fibrillation in mice*; *Nat. Commun.* **5** 5705
- 8) Eroglu et al. (2014), *Therapeutic inducers of the HSP70/HSP110 protect mice against traumatic brain injury*; *J. Neurochem.* **130** 626

PHYSICAL DATA

Molecular Weight:	351.28
Molecular Formula:	C ₁₄ H ₂₂ N ₄ O ₂ ·2HCl
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	Water (70 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in water may be stored at -20°C for up to 1 month.

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