# Biotics Research Corporation Product Showcase Berberine HCI

### For Healthcare Professionals Only 90 Capsules

Berberine is a bitter-tasting alkaloid present in the roots, rhizomes and stem barks of select plants including Barberry (Berberis vulgaris).<sup>1</sup> Berberine has a long history of use in both Chinese and Ayervedic medicine, primarily to support gastrointestinal function. Berberine has demonstrated significant activity against a wide variety of organisms including a broad spectrum of bacteria, yeasts, fungus and parasites. Its mechanism of action is thought to result in part from its characteristic structure, which is that of a planar catonic molecule. This structural arrangement enables it to intercalate the DNA structure, similar in fashion the mechanism of ethidium bromide.<sup>2</sup>

In addition, Berberine has been shown to be supportive of healthy blood sugar levels, including fasting and postprandial blood glucose, and HbA1c, as well.<sup>3</sup> The mode of action is believed to result from its ability to modulate key molecules in the insulin signaling pathway, leading to increased glucose uptake in insulin-resistant cells.<sup>4</sup>

Berberine has also been shown to be supportive of normal blood lipid levels, with the apparent mode of action being described as an increase in the production of a receptor protein in the liver which binds LDL-cholesterol, preparing it for elimination.<sup>5</sup>

Cautions: Berberine HCl is not recommended for children, pregnant or lactating women, or those suffering from congestive heart failure.

For additional information please contact us: Biotics Research Corporation • (800) 231 - 5777 6801 Biotics Research Drive • Rosenberg, TX 77471 biotics@bioticsresearch.com www.bioticsresearch.com

LIT-188 Rev. 12/12 © Copyright 2012



# Berberine HCI - #5212

#### **Supplement Facts**

Serving Size: 1 Capsule

	Amount Per Serving	% Daily Value
Berberine Hydrochloride	500 mg	*
* Daily Value not established		

Other ingredients: Cellulose, capsule shell (gelatin and water) and magnesium stearate (vegetable source).

Berberine HCI is purified from Berberis vulgaris.

This product is gluten and dairy free.

**RECOMMENDATION:** One (1) capsule each day as a dietary supplement or as otherwise directed by a healthcare professional.

CAUTION: Not recommended for children, pregnant or lactating women.

KEEP OUT OF REACH OF CHILDREN Store in a cool, dry area.

Sealed with an imprinted safety seal for your protection. Product # 5212 Rev. 11/12

## This product is gluten and dairy free.

#### References

- I. Berberine. Altern Med Rev. 2000;5(2):175-177.
- 2. Jennings BR, Ridler PJ. Interaction of chromosomal stains with DNA. An electrofluorescence study. *Biophys Struct Mech.* 1983;10(1-2):71-9.
- 3. Yin J, Xinga H, Yeb J. Efficacy of berberine in patients with type 2 diabetes mellitus. *Metabolism Clinical and Experimental*. 2008 57:712–717.
- Liua L-Z, Cheunga SCK, Lana L-L, Hoa SKS, Xub H-X, Chana JCN, Tong PCY. Berberine modulates insulin signaling transduction in insulin-resistant cells. *Molecular and Cellular Endocrinology*. April 2010 317(1-2): 148–153.
- Kong Weijia, et al. Berberine is a novel cholesterol-lowering drug working through a unique mechanism distinct from statins. *Nature Medicine*. 2004 10(12):1344-1351.



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.