

TECHNOLOGY

Use of Omentin for Treatment and Prediction of Disease

OVERVIEW

Obesity, especially accumulation of abdominal fat, is a risk factor for the development of type 2 diabetes and cardiovascular disease. More than one-third of US adults are considered to be obese.

Omentin is an adipokine expressed and secreted from abdominal but not subcutaneous adipose tissue. Omentin levels in plasma and adipose tissue have been shown to be decreased in obesity and obesity-related disorders including type 2 diabetes, atherosclerosis and ischemic heart disease. Additionally, several in vitro and in vivo studies have shown that omentin enhances insulin-mediated glucose-uptake, attenuates type 2 diabetes-dependent insulin resistance, and has protective effects on the development of cardiovascular disease.

UMB inventors propose that administration of omentin polypeptides can enhance insulin action and/or glucose metabolism to treat obesity and diseases including type 2 diabetes and cardiovascular disease. Additionally, measuring levels of expression of omentin proteins in a subject can form the basis of diagnosis or predicting an increased risk of insulin resistance, obesity, pre-diabetic conditions, hypertension and cardiovascular disease.

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Additional Information

INSTITUTION

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PATENT STATUS

Issued US patents: US7312197 B2, US7550435 B2, US8058014 B2

LICENSE STATUS

Available for licensing

CATEGORIES

- Research Tools, Antibodies, & Reagents
- Diagnostics

- TherapeuticsBiologics
- Biomaterials

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