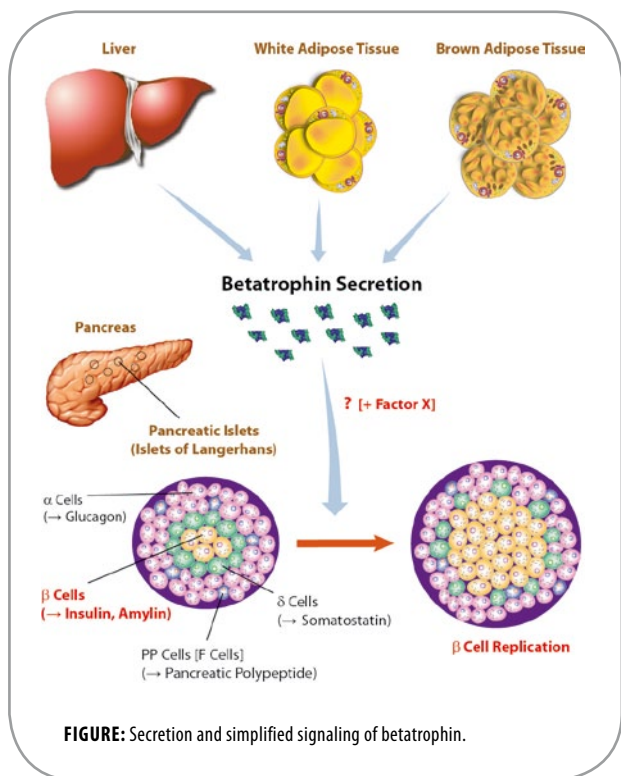


**UNIQUE** Produced in Mammalian Cells

# Betatrophin

## Controlling $\beta$ Cell Replication and $\beta$ Cell Mass



Betatrophin (RIFL; Lipasin; Angiopoietin-like protein 8 (ANGPTL8)) is a new secreted protein of 198 aa that promotes  $\beta$  cell proliferation and improves glucose tolerance in mice. Betatrophin may also function in inhibition of lipase activity and on serum triglyceride regulation. Betatrophin is expressed in the liver and in white and brown adipose tissue of mice. In humans, betatrophin is found to be predominantly expressed in the liver. Betatrophin levels are reduced by fasting and are elevated upon insulin resistance and during pregnancy. Although the mechanism of action of betatrophin is unknown and its receptor is still to be discovered, identification of this new protein as a hormone controlling  $\beta$  cell replication and  $\beta$  cell mass opens a new door to a potential future diabetes therapy.

**LITERATURE REFERENCES:**

Mice lacking ANGPTL8 (Betatrophin) manifest disrupted triglyceride metabolism without impaired glucose homeostasis: Y. Wang, et al.; PNAS **110**, 16109 (2013)  
 • Betatrophin: a hormone that controls pancreatic  $\beta$  cell proliferation: P. Yi, et al.; Cell **153**, 747 (2013)  
 • Atypical angiopoietin-like protein that regulates ANGPTL3: F. Quagliarini, et al.; PNAS **109**, 19751 (2012)  
 • Identification of RIFL, a novel adipocyte-enriched insulin target gene with a role in lipid metabolism: G. Ren, et al.; Am. J. Physiol. Endocrinol. Metab. **303**, E334 (2012)  
 • Lipasin, a novel nutritionally-regulated liver-enriched factor that regulates serum triglyceride levels: R. Zhang; BBRC **424**, 786 (2012)

<b>Betatrophin (human):Fc (human) (rec.)</b>			NEW
AG-40B-0145-C010		10 $\mu$ g	
AG-40B-0145-3010	MultiPack	3 x 10 $\mu$ g	
<b>Betatrophin (mouse) (rec.)</b>			
AG-40B-0144-C010		10 $\mu$ g	
AG-40B-0144-3010	MultiPack	3 x 10 $\mu$ g	

<b>Betatrophin (mouse): Fc (human) (rec.)</b>			<b>BULK</b> available for in vivo studies!
AG-40B-0142-C010		10 $\mu$ g	
AG-40B-0142-3010	MultiPack	3 x 10 $\mu$ g	