

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Hyperglycemia	Cyclic adenosine monophosphate response element-binding protein 2 (CRTC2)	<i>In vitro</i> and <i>in vivo</i> studies suggest that lowering levels of glycosylated CRTC2 could improve glucose homeostasis and help treat chronic hyperglycemia. CRTC2 plays a role in the gluconeogenic pathway in the liver. In hepatocytes, O-glycosyl transferase (OGT) glycosylates CRTC2, whereas O-GlcNAcase (GCA) deglycosylates CRTC2. Insulin-resistant mice that overexpressed GCA had greater glucose tolerance and insulin sensitivity than insulin-resistant mice that overexpressed GFP control protein. Wild-type mice that overexpressed GCA and were on a high-fat diet showed similar trends. Ongoing studies are investigating the role of CRTC2 function in the liver and other tissues.	Not applicable	Dentin, R. <i>et al. Science</i> ; published online March 6, 2008; doi:10.1126/science.1151363 Contact: Marc Montminy, Salk Institute for Biological Studies, La Jolla, Calif. e-mail: montminy@salk.edu