

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	β -Site APP-cleaving enzyme 2 (BACE2); BACE1; transmembrane protein 27 (TMEM27)	<p>Cell culture and mouse studies suggest preventing TMEM27 cleavage by inhibiting BACE2 could help treat type 2 diabetes. TMEM27 promotes pancreatic β cell function but is negatively regulated by a previously unknown protease. In a mouse pancreatic β cell line, small interfering RNA knockdown of Bace2 decreased Tmem27 cleavage compared with knockdown of Bace1 or a panel of other proteases. In a mouse model of type 2 diabetes, a BACE2 inhibitor increased both β cell mass and glucose tolerance compared with vehicle.</p> <p>Roche, which coauthored the study, said that it has performed additional preclinical experiments to further explore the utility of the target but declined to disclose next steps.</p> <p>SciBX 4(37); doi:10.1038/scibx.2011.1042 Published online Sept. 22, 2011</p>	<p>Patent applications filed by Roche covering assays relevant to the target; unavailable for licensing; patent and licensing status from the Swiss Federal Institute of Technology Zurich (ETHZ) unavailable</p>	<p>Esterházy, D. <i>et al. Cell Metab.</i>; published online Sept. 7, 2011; doi:10.1016/j.cmet.2011.06.018 Contact: Markus Stoffel, Swiss Federal Institute of Technology Zurich (ETHZ), Zurich, Switzerland e-mail: stoffel@imsb.biol.ethz.ch</p>