

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Celiac disease	Transglutaminase 2 (TGM2; TG2)	<i>In vitro</i> studies identified autoantibody binding sites of TG2 that could be blocked to help treat celiac disease. <i>In vitro</i> studies showed that mutation in any of three spatially adjacent residues on the TG2 protein prevented binding of celiac autoantibodies compared with mutation in other residues. In <i>ex vivo</i> placental tissue from celiac patients, a mAb targeting the identified epitope caused release of autoantibodies compared with an anti-TG2 mAb binding a different epitope. Next steps include testing the efficacy of the antibody in an animal model of celiac disease.	Patent applications filed for diagnostic and therapeutic applications; available for licensing	Simon-Vecsei, Z. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Dec. 22, 2011; doi:10.1073/pnas.1107811108 Contact: Ilma R. Korponay-Szabó, University of Tampere and University of Tampere Hospital, Tampere, Finland e-mail: loilko@uta.fi
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