Introducing IMG-AbS™

ImmunoGenes's patented technology platform IMG-AbS™, is an FcRn technology using genetically modified animals that overexpress the neonatal Fc Receptor (FcRn). Because of FcRn's role in antigen presentation, the company's animals are able to mount a strong immune response against weakly immunogenic targets. This gives us the ability to help you in your research by generating antibodies against difficult targets.

Customized Antibody Solutions

Collaborative Research

Superior Support

Contact

Please contact ImmunoGenes at antibody@immunogenes.com to obtain more information.

EUROPE

Switzerland
ImmunoGenes AG
Innere Güterstrasse 4
CH-6304 Zug

Hungary
ImmunoGenes Kft
Hunor utca 20/A
2092 Budakeszi, Hungary
T: +36-30-757-7870
F: +36-23-455-202

UNITED STATES

325 West End Avenue
New York, NY 10023
T: 917-327-6423

immunogenes

www.immunogenes.com

The Changing Face of Antibody Production

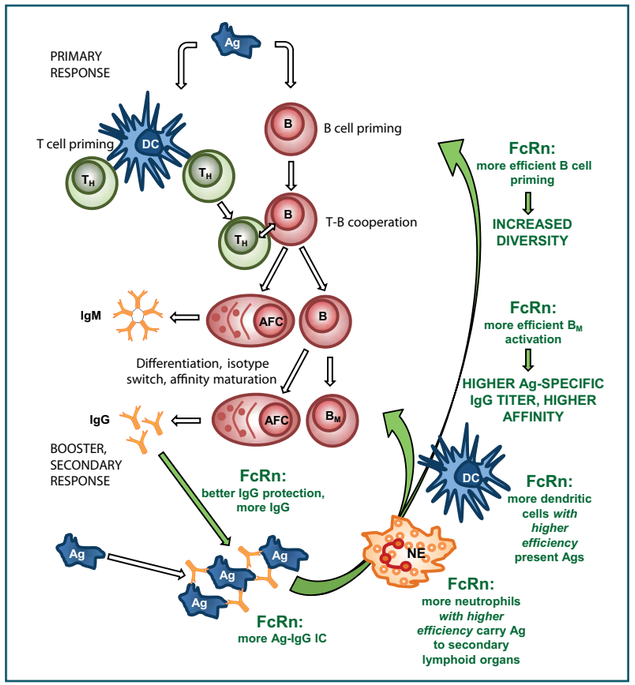
FcRn Overexpression Leads to Better Antigen Presentation and Greater Antibody Diversity

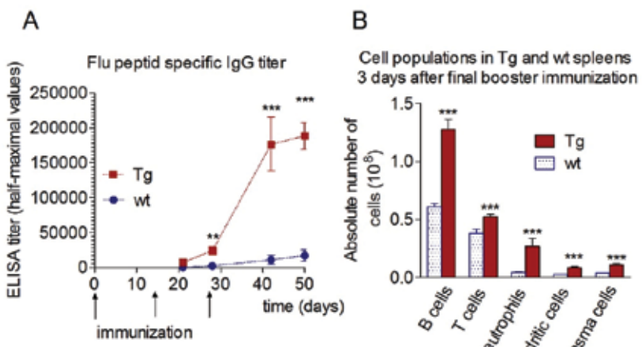
immunogenes

FcRn Overexpression

A SOLUTION FOR DIFFICULT ANTIGENS

- Generates antibodies against weakly immunogenic antigens [1]
- Produces highly diverse antibodies [2]
- Generates a higher number of antigen specific B cells [3]
- Breaks immune tolerance to highly conserved antigens
- Significantly improves hybridoma production [4]
- Higher levels of circulating antibodies [5]





Source: Vegh et al. 2011

Customized Antibody Solutions

ImmunoGenes produces monoclonal and polyclonal antibodies using our IMG-AbS™ platform technology. This patented technology allows us to produce high quality and diverse antibodies against challenging antigens. IMG-AbS™ is redefining the parameters of antibody production by offering highly customized antibodies that are difficult or impossible to generate using standard methods.

immunogenes

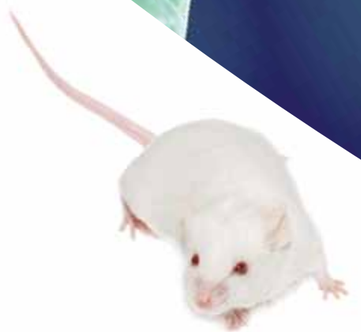
The ImmunoGenes Difference

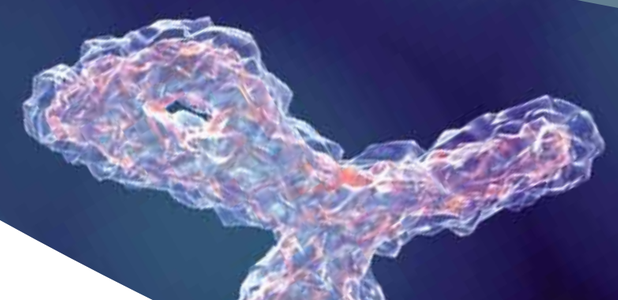
ImmunoGenes is a biopharmaceutical company specialized in the generation of transgenic animals for the production of polyclonal and monoclonal antibodies. Our unique approach to antibody production starts with a genetic modification that leads to the overexpression of a particular receptor (FcRn). This receptor overexpression, in turn, makes these animals ideal for the production of high quality antibodies against weakly immunogenic targets, as it improves antigen presentation and antibody diversity.

Genuine Customization

We specialize in highly customized antibody production. Our in-house scientists will collaborate with you to develop a custom solution to fit your protocol.

- Custom project design
- Rapid response
- Collaboration for results





SCIENTIFIC PUBLICATIONS

[2] Vegh. A, Farkas, A, Kövesdi. D, Papp. K, Cervenak. J, Schneider. Z, Bender. B, Hiripi. L, László. G, Prechl. G, Matkó. J and Kacskovics, I. (2012). FcRn overexpression in transgenic mice results in augmented APC activity and robust immune response with increased diversity of induced antibodies. PLos One 2012 (In press).

Duranthon V, Beaujean N, Brunner M, Odening KE, Santos AN, Kacskovics I, Hiripi L, Weinstein EJ, Bosze Z (2012) On the emerging role of rabbit as human disease model and the instrumental role of novel transgenic tools. Transgenic Research. Mar 2.

[1] Vegh, A., Cervenak, J., Jankovics, I., and Kacskovics, I. (2011). FcRn overexpression in mice results in potent humoral response against weakly immunogenic antigen. mAbs. March 1; 3(2):173-80.

[3] Cervenak, J., Bender, B., Schneider, Z., Magna, M., Carstea, B.V., Liliom, K., Erdei, A., Bosze, Z., and Kacskovics, I. (2011). Neonatal FcR overexpression boosts humoral immune response in transgenic mice. Journal of Immunology, 186, 959-968

[5] Kacskovics I, Cervenak J, Erdei A, Goldsby RA, Butler JE (2011) Recent advances using FcRn overexpression in transgenic animals to overcome impediments of standard antibody technologies. mAbs 3: 431-439.

Lemos APC, Cervenak J, Bender B, Hoffmann O, Baranyi M, Kerekes A, Farkas A, Bosze Z, Hiripi L, Kacskovics I (2011) Characterization of the rabbit neonatal Fc receptor (FcRn) and analyzing the immunophenotype of the transgenic rabbits that overexpress FcRn. PLoS One; 7(1):e28869.

[4] Schneider, Z., Cervenak, J., Baranyi, M., Papp, K., Prechl, J., Gloria, L., Erdei, A., and Kacskovics, I. (2011). Transgenic expression of bovine neonatal Fc receptor in mice boosts immune response and improves hybridoma production efficiency without any sign of autoimmunity. Immunology Letters. Jun 30; 137(1-2):62-9.

Bender, B., Bodrogi, L., Mayer, B., Schneider, Z., Zhao, Y., Hammarstrom, L., Eggen, A., Kacskovics, I., and Bosze, Z. (2007). Position independent and copy-number-related expression of the bovine neonatal Fc receptor alpha-chain in transgenic mice carrying a 102 kb BAC genomic fragment. Transgenic Research 16, 613-627.