



**THE UNIVERSITY of TEXAS**

**HEALTH SCIENCE CENTER AT HOUSTON**

Office of Technology Management

## **FACTOR B KO MOUSE ON C57/BL/6 GENETIC BACKGROUND**

The Technology: Researchers at the University of Texas Health Science Center at Houston (UTHSC-H) have developed complement factor B-deficient mice on C57Black6 background via the disruption of the murine Bf, exon 3 through exon 7. It is becoming increasingly clear that factor B plays an important role in the regulation of the alternative complement pathway. The role of factor B in disease pathogenesis, however, is unclear. This well-characterized model lacks the complement factor B, making it an excellent model for studying the role of the alternative complement pathway in immune complex mediated diseases.

### Publications:

- Watanabe H, Garnier G, Circolo A, Wetsel RA, Ruiz P, Holers VM, Boackle SA, Colten HR, Gilkeson GS. Modulation of renal disease in MRL/lpr mice genetically deficient in the alternative complement pathway factor B. *J Immunol.* 2000 Jan 15;164(2):786-94.
- Ishikawa N, Nonaka M, Wetsel RA, Colten HR. Murine complement C2 and factor B genomic and cDNA cloning reveals different mechanisms for multiple transcripts of C2 and B. *J Biol Chem.* 1990 Nov 5;265(31):19040-6.
- Matsumoto. M., W., A. Fukuda, J. Circolo, J. Goellner, X. Strauss-Schoenberger, S. Wang, T. Fujita, D. D. Hidvegi, D. D. Chaplin, H. R. Colten. 1997. Abrogation of the alternative complement pathway by targeted deletion of murine factor B. *Proc. Natl. Acad. Sci. USA* 94:8720.

### **NON-CONFIDENTIAL TECHNOLOGY DESCRIPTION**

The preceding is intended to be a non-confidential summary of a novel technology created at the University of Texas Health Science center at Houston (UTHSCH), for which the University has obtained patent protection.

**UTHSC-H Ref. No.:** 2007-0021 RMD

**Inventors:** Wetsel, et al.

**Patent Status:** N/A

**License Available:** worldwide; non-exclusive

To obtain further information about this technology, please contact:  
Office of Technology Management, 7000 Fannin, Suite 720, Houston, TX, 77030  
Phone: (713) 500-3369 Fax: (713) 500-0331  
Email: uthsch-otm@uth.tmc.edu