mFPR2 Transgenic and Knockout Mouse Models for Alzheimer’s and Other Inflammatory Diseases

**Description of Invention:** Human Formyl Peptide-Like Receptor 1 (hFPRL1) has been implicated in host defense for disease processes including Alzheimer’s disease, infection, and other inflammatory diseases. hFPRL1 and its mouse homologue Formyl Peptide Receptor 2 (mFPR2) are G-protein coupled receptors that are expressed at high levels on phagocytic leukocytes, mediating leukocyte chemotaxis and activation in response to a number of pathogen- and host-derived peptides. Activation of hFPRL1/mFPR2 by lipoxin A4 may play a role in preventing and resolving inflammation. Also, hFPRL1/mFPR2 has been shown to mediate the chemotactic activity of amyloid beta 1-42, a key pathogenic peptide in Alzheimer’s disease.

Available for licensing are mice expressing the mFPR2 transgene on either the FVB or C58BL background, as well as mFPR2 knockout mice on the C57BL background. These mice are anticipated to be highly useful in the study of a wide variety of inflammatory, infectious, immunologic, and neurodegenerative diseases.

**Applications**
- Drug development model for Alzheimer’s disease and other inflammatory diseases.
- Tool to probe the role of hFPRL1/mFPR2 in host responses in a variety of disease processes, including inflammatory, infectious, immunologic, and neurodegenerative disease.

**Inventors:** Ji Ming Wang et al. (NCI)

**Publications**


**Licensing Status:** This technology is available as a research tool under a Biological Materials License.

**Licensing Contact:** Tara Kirby, PhD; 301–435–4426; tarak@mail.nih.gov.

**Collaborative Research Opportunity:** The National Cancer Institute—Frederick, Laboratory of Molecular Immunoregulation, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize mFPR2 Transgenic and Knockout Mouse Models for Alzheimer’s and Other Inflammatory Diseases. Please contact John D. Hewes, PhD at 301–435–3121 or hewesj@mail.nih.gov for more information.

**Dated:** March 23, 2010.

**Richard U. Rodriguez,**
Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**National Institute of Allergy and Infectious Diseases; Notice of Meeting**

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of a meeting of the AIDS Advisory Committee, NIAID. The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

**Name of Committee:** AIDS Research Advisory Committee, NIAID, AIDS Vaccine Research Subcommittee.

**Date:** May 25–26, 2010.

**Time:** 8:30 a.m. to 5 p.m.

**Agenda:** To discuss follow-up studies to the recent RV144 vaccine efficacy trial, and to discuss the use of the nonhuman primate model in AIDS vaccine research.

**Place:** Bethesda North Marriott Hotel & Conference Center, 5701 Marinelli Road, Bethesda, MD 20852.

**Contact Person:** James A. Bradac, PhD, Program Officer, Preclinical Research and Development Branch, Division of AIDS, Room 5116, National Institutes of Health/ NIAID, 6700B Rockledge Drive, Bethesda, MD 20892–7628, 301–435–3754. jbradac@mail.nih.gov.