Drug Discovery & Development

Transgenic Mouse for Testing Chemotherapeutic Agents

WARF: P00331US

Inventors: Mary Ellen Perry, Susan Mendrysa

The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in transgenic mice that are conditional knockouts for *mdm2*.

Overview

The gene *mdm2* is a negative regulator of *p53*, which plays a key role in apoptosis and is important in chemotherapy. Mice with knockout mutations in *mdm2* would be useful in studying this gene; however, *mdm2* is also essential for embryonic development.

The Invention

UW-Madison researchers have developed transgenic mice that are conditional knockouts for *mdm2*. In these mice, exons 7-9 of the *mdm2* gene are flanked with a particular sequence. When exposed to a specific recombinase, these exons should be deleted, rendering the gene non-functional.

Applications

- Mice may be useful for testing chemotherapeutic agents.
- Murine embryonic fibroblasts (MEFs) from the mice may also be useful for testing chemotherapeutic agents.
- MEFs could be used as positive controls in assays to screen for compounds that interfere with the *mdm2/p53* interaction.

Key Benefits

- Knockout mutations can be tissue specific.

Tech Fields

- Drug Discovery & Development : Preclinical testing
- Research Tools : Animal & disease models

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854