

## ALZHEIMER'S MODEL

ORDER CODE: ALZHEIMER

SPECIES: Rat

DIET SUPPLEMENT: None required

The degeneration of cholinergic neurons in the basal forebrain (CBF) is one of the prominent features of Alzheimer's Disease. In the Alzheimer's Model, an injection is given into the left lateral ventricle of the rat that destroys the CBF and impairs passive avoidance learning.

### **Surgical Procedure**

The animal is prepared for surgery using pre-operative and anesthetic procedures as described in our *Surgical Capabilities Reference Paper*, Vol. 13, No.1, 2005. The animal is mounted onto the stereotaxic equipment. Coordinates are measured in accordance with the size and age of the animal. A pre-specified amount of 192-saporin is injected into the basal forebrain at the assigned coordinate. After the injection is completed, the animal is removed from the stereotaxic equipment.

The material injected was developed from a monoclonal antibody, 192 IgG, which recognizes the appropriate neurotrophin receptor and then arms it with 192-saporin. Charles River Laboratories has a licensing agreement with Advanced Targeting Systems, Inc. for this monoclonal antibody.

### **IACUC**

Charles River's Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including any post-operative holding in CRL facilities prior to shipment. The receiving institution's Animal Care and Use Committee, investigators, and animal care staff are responsible for the well-being of the animal subsequent to its arrival. Justification for use of surgically-modified animals, review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of surgically-modified animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.

April 2000