

Phenotyping: Hypertension Panel

Charles River Discovery Services provides a variety of therapeutic phenotyping panels to assist with characterizing your unique models.

Our Hypertension Panel includes:

Basic Characterization

- *PhenoFirst® Panel*

PhenoFirst® includes *in vivo* evaluation, basic pathology, and basic clinical pathology. This panel targets organs of the heart, aorta, and kidneys. The minimum recommended sample size is three homozygous or knockout mice and three wild type controls that are matched for age, sex, genetic background, and health status.

Additional Characterization

- *Age of Onset Study*

A breeding colony is set up at Charles River to monitor the blood glucose levels of offspring. Bi-weekly testing of blood glucose levels begins at six weeks of age for all offspring. The resulting data is used to determine age of onset of hypertension and to calculate the percentage of animals affected. The minimum recommended sample size is five breeding pairs that produce sufficient litters to generate 50 offspring of each sex and genotype being characterized.

- *Rodent Multi-Analyte Profile plus Blood Glucose Level*

Each animal is screened for 60 plasma biomarker levels including insulin. The minimum recommended sample size is five homozygous or knockout mice and five wild type controls that are matched for age, sex, genetic background, and health status.

- *Challenge Test and Blood Pressure Assessment*

The age of onset study is repeated, but half of the animals are placed on a special diet (e.g., a high- or low-sodium diet). The resulting data is used to determine how diet influences the age of onset of hypertension. In addition, the data is used to calculate the percentage of animals that develop hypertension. The minimum recommended sample size is five breeding pairs that produce sufficient litters to generate 50 offspring of each sex and genotype being characterized.

Customized Characterization

We recognize that research goals vary. Our team of laboratory animal professionals is available to customize a model characterization plan that meets individual needs and helps you achieve your goals more efficiently.

Available Panels

In addition to the Hypertension Panel, Discovery Services provides targeted phenotyping to characterize obesity, diabetes, metabolism, respiratory function, osteoporosis, reproduction issues, embryonic lethality, Huntington's disease, and neurodegenerative disease in your unique model.

For more information, please call 1.877.CRIVER.1 or e-mail askcharlesriver@crl.com.