Genetic Rat Model for Pulmonary Hypertension

**Title:** Genetic Rat Model for Pulmonary Hypertension

**Invention:** This technology is a genetic rat model with a human mutation that allows for the study of pulmonary hypertension. This new model is ideal for studying the contribution of mitochondrial dysfunction that occurs in the development and progression of pulmonary hypertension.

**Background:** Pulmonary hypertension (PH) is an increase in blood pressure within the arteries of the lungs and is one of the most devastating chronic lung diseases. Animal models of pulmonary hypertension have contributed to better understanding the underlying mechanisms but current models are often induced through chemicals and are not an ideal model of pulmonary hypertension. This new mouse model utilizes human mutations that actually occur in pulmonary hypertension to better mimic it.

**Applications:**
- Pulmonary hypertension research
- Medical research
- Preclinical trials

**Advantages:**
- Provides an improved research model
- Specifically models pulmonary hypertension (PH)
- Allows for the study of mitochondrial dysfunction
- Utilizes a human mutation

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