

CMHD Pathology Report



CMHD Pathology Core

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Mouse Genetics Project

Wellcome Trust Sanger Institute Wellcome Trust Genome Campus Hinxton, Cambridge CB10 1SA UK

ReportID: Report Date: January 08, 2014

Pathologist: Dr. H. Adissu

CMHD LabID: N13-707

Relevant History:

Phenotype:

Increased heart weight in males Homozygotes: preweaning lethality

AnimalID: M01013750 (Male) Histopathology Findings:

heart (MA:0000072)

Histopath Description:

Normal

Definitive Diagnosis:

Normal

Histopathology Comments: compare with M01013749



Heart, normal, 1.25x, HE



Heart, WT, normal, 1.25x, HE

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

AnimalID: M01013749 (Male) Histopathology Findings: heart (MA:0000072)

Histopath Description:

The entire section is an estimated 1.25x larger compared to WT. The enlargement is generalized affecting all chambers. Epicaridal and endocardial surfaces appear normal.

Morphological Diagnosis:

Distribution: generalized; **Severity:** severe; **MPATH Diagnosis:** hypertrophic tissue MPATH:631; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

cardiomegaly

Histopathology Comments:

The lesion is consistent with clinical phenotype





Heart, cardiomegally, 1.25x, HE

Heart, WT, normal, 1.25x, HE

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

AnimalID: M01005567 (Female)

Histopathology Findings:

heart (MA:0000072)

Histopath Description:

Normal

Definitive Diagnosis:

Normal

Histopathology Comments:

compare with M01013749





Heart, normal, 1.25x, HE

Heart, WT, normal, 1.25x, HE

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

AnimalID: M01005566 (Female)

Histopathology Findings:

heart (MA:0000072)

Histopath Description:

Normal

Definitive Diagnosis:

Normal

Histopathology Comments:

compare with M01013749





Heart,, normal, 1.25x, HE

Heart, WT, normal, 1.25x, HE

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

Report Summary and Recommendation:

Cardiomegally was observed in one male mouse. There are no lesions elswehere in the body to suggest secondary cardiac hypertrophy. Hence this is considered a primary cardiomegally. No morphological abnormalities were detected to predict preweaning lethality in homozygotes. Analysis of homozygous preweaning mice is recommended.

Summary - Cardiomegally (1/2 males).