

CMHD Pathology Core

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CMHD Pathology Report

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Mouse Genetics Project

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Mouse Portal Europhenome

CMHD LabID: N13-563

Relevant History:

Phenotype:

- chromosomal instability
- increased chromosomal stability

AnimalID: M00655072 (Male)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; Severity: extreme; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis:

hepatic steatosis

retina (MA:0000276)

Histopath Description:

Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:

Distribution: Focal; **Severity:** mild;

Definitive Diagnosis:

Retinal dysplasia

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: M00655974 (Male)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; **Severity:** extreme; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:

hepatic steatosis

retina (MA:0000276)

Histopath Description:

Involving one eye, there are clusters of external nuclear structures within the internal and outer plexiform layer.

Morphological Diagnosis:

Distribution: Focal; Severity: mild;

Definitive Diagnosis:

Retinal dysplasia

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: M00655980 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; Severity: extreme; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis:

hepatic steatosis

brain (MA:0000168)

Histopath Description:

There is mild dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: bilateral; Severity: mild;

Definitive Diagnosis:

Dilation of the brain ventricles

Histopathology Comments:

Mild dilation of the lateral ventricles is a background condition in mice of C57BL/6N background (Brayton et al., 2004).

parathyroid gland (MA:0000128)

Histopath Description:

The parathyroid gland is partially replaced by a lymphoid tissue reminiscent of thymic tissue.

Morphological Diagnosis:

Distribution: multifocal;

Definitive Diagnosis:

Ectopic thymic tissue

Histopathology Comments:

incidental

retina (MA:0000276)

Histopath Description:

Involving one eye, there are clusters of external nuclear structures within the internal and outer plexiform layer.

Morphological Diagnosis:

Distribution: Focal; Severity: mild;

Definitive Diagnosis:

Retinal dysplasia

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: M00655979 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; Severity: extreme; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis:

hepatic steatosis

brain (MA:0000168)

Histopath Description:

There is mild dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: bilateral; Severity: mild;

Definitive Diagnosis:

Dilation of the brain ventricles

Histopathology Comments:

Mild dilation of the lateral ventricles is a background condition in mice of C57BL/6N background (Brayton et al., 2004).

sternum (MA:0001331)

Histopath Description:

There is a full thickness fracture between the 4th and 5th sternabra segments. There is marked nodular hyperplasia of the cartilage tissue surrounding the fracture (calus)

Morphological Diagnosis:

Distribution: focally extensive; MPATH Diagnosis: inflammation MPATH:212

Definitive Diagnosis:

Sternal osteoarthritis with fracture and regenerative chondroid hyperplasia.

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:

We did not find correlative lesions to chromosomal instability documented in clinical phenotyping. Lesions in this line are attributable to diet or strain background.