

CMHD Pathology Core Toronto Centre for Phenogenomics 25 Orde St. 3rd fl. Toronto, Ont. M5T 3H7 Tel.(416) 586-8375 Fax (416) 586-5993



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

contact: Dr. Susan Newbigging email: <u>newbigging@lunenfeld.ca</u> ReportID: Report Date: February 26, 2014 Pathologist: Dr. H. Adissu

CMHD Pathology

Report

CMHD LabID: N13-1051

Relevant History: phenotype:

no hits (no phenotype)

AnimalID: M01161361 (Male)

Histopathology Findings:

lung (MA:0000415)

Histopath Description: Multifocal prominent peribronchiolar chronic inflammatory aggregate

Morphological Diagnosis:

Duration: chronic; **Distribution:** multifocal; **Severity:** mild; **MPATH Process Term:** inflammation MPATH:212

Definitive Diagnosis:

Peribronchiolar inflammatory aggregate

eye (MA:0000261)

Histopath Description:

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

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia MPATH:64

Definitive Diagnosis: Retinal dysplasia

liver (MA:0000358)

Histopath Description: diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; Severity: extreme; MPATH Diagnosis: steatosis MPATH:622; MPATH Process Term: lipid deposition MPATH:42

Definitive Diagnosis: Hepatic lipidosis

Histopathology Comments: This is dietary steatosis

brown fat (MA:0000057)

Histopath Description: There is mild inflammation and hemorrhage affecting 20% of the brown fat tissue examined

Morphological Diagnosis: Severity: moderate; MPATH Diagnosis: steatitis MPATH:636; MPATH Process Term: inflammation MPATH:212

Definitive Diagnosis: Hemorrhagic steatitis of the brown fat

Histopathology Comments: The lesion was likely traumatic origin

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: M01103520 (Male) Histopathology Findings:

eye (MA:0000261)

Histopath Description:

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

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia MPATH:64

Definitive Diagnosis: Retinal dysplasia

liver (MA:0000358)

Histopath Description: No lipidosis seen Definitive Diagnosis: Absent hepatic lipidosis

Histopathology Comments: Dietary hepatic lipidosis is expected

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: M01249704 (Female) Histopathology Findings: brain (MA:0000168)

Histopath Description: There is marked dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** hydrocephalus MPATH:639; **MPATH Process Term:** degenerative change MPATH:14

Definitive Diagnosis:

Dilation of the brain ventricles

Histopathology Comments:

Mild to moderate dilation of the ventricles is a background condition in mice of C57BL/6N background

eye (MA:0000261) Histopath Description: Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia MPATH:64

Definitive Diagnosis: Retinal dysplasia

liver (MA:0000358)

Histopath Description: diffuse lipidosis

Morphological Diagnosis:

Distribution: diffuse; Severity: extreme; MPATH Diagnosis: steatosis MPATH:622; MPATH Process Term: lipid deposition MPATH:42

Definitive Diagnosis: Hepatic lipidosis

Histopathology Comments: This is dietary steatosis

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: M01201288 (Female)	
Н	listopathology Findings:
	brain (MA:0000168)
	Histopath Description:
	There is marked dilation of the lateral ventricles
	Morphological Diagnosis:
	Distribution: diffuse; Severity: severe; MPATH Diagnosis: hydrocephalus MPATH:639; MPATH Process Term: degenerative change MPATH:14
	Definitive Diagnosis: Dilation of the brain ventricles
	Histopathology Comments: Mild to moderate dilation of the ventricles is a background condition in mice of C57BL/6N background
	liver (MA:0000358)
	Histopath Description: diffuse lipidosis
	Morphological Diagnosis: Distribution: diffuse; Severity: moderate; MPATH Diagnosis: steatosis MPATH:622; MPATH Process Term: lipid deposition MPATH:42
	Definitive Diagnosis: Hepatic lipidosis
	Histopathology Comments: This is dietary steatosis
	thymus (MA:0000142)
	Histopath Description: There are two 50 um diamater epithelial cysts.
	Morphological Diagnosis: Distribution: multifocal; MPATH Diagnosis: cyst MPATH:62; MPATH Process Term: developmental and structural abnormality MPATH:55
	Definitive Diagnosis: Epithelial cyst

This is a developmental abnormality commonly seen in mice.

Histopathology Comments:

lymph node (MA:0000139)

Histopath Description:

The mesenteric lymph node is markedly enlarged (greater than four fold). The medulla is particularly expanded by chords and sheets of plasmatoid cells. There are promient germinal centers within the medulla

Morphological Diagnosis:

Distribution: Diffuse; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia

Histopathology Comments:

The changes in the mesenteric lymph node are suggestive of draining of a regional inflammatory process. However, such a process was not observed in the tissues examined. Early maginal center lymphoma is suspected.

adrenal gland (MA:0000116)

Histopath Description:

There is a small, well-circumscribed mass in the cortex. It is encapsulated by a thin layer of pale eosinophlic material and fusiform cells (connective tissue with fibroblasts) and is made of nests of polygonal cells interspersed by a very thin fibrovascular membrane. The architecture is reminisecent of the zona glomerulosa and zona fasciculate of the mature adrenal gland.

Morphological Diagnosis:

Distribution: focal; **MPATH Process Term:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

accessory adrenal cortical tissue

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:

Lesions in this line are incidental or attributable to diet or strain background.

Line summary: none