

## **CMHD Pathology Core**

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

contact: Dr. Susan Newbigging

email:

newbigging@lunenfeld.ca

# CMHD Pathology Report

Principle Investigator: Dr. Colin McKerlie **ICSIG** 

Institute: Sick Kids

Address:

ReportID: Report Date: November 23,

2011

Pathologist: H. Adissu



**Mouse Genetics Project** 

Wellcome Trust Sanger Institute

Wellcome Trust Genome

Campus

Hinxton, Cambridge

**CB10 1SA** 

UK

email:

MGPenguiries@sanger.ac.uk

Mouse Portal Europhenome

**CMHD LabID: N11-196** 

#### **Relevant History:**

(Citrobacter Challenge) Decrease in colon weight indicating decreased susceptibility to bacterial infection

# AnimalID: M00301598 Inpp1hom

## **Tissue Preservation and Staining:**

There is artifactual sepration of dermis and subcutis. One of the eyes is artifactually disrupted. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

## **Histopathology Findings:**

## liver (MA:0000358)

## **Histopath Description:**

The overall hepatic lobular architecture is normal. Approximately 50% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid).

## **Morphological Diagnosis:**

Distribution: Multifocal; Severity: mild; MPATH Diagnosis: lipid deposition MPATH:42

#### **Definitive Diagnosis:**

Hepatic lipidosis.

## **Histopathology Comments:**

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTSI, consistent with high lipid diet.

## Organ/Tissue Analyzed:

NSF will be appended

# AnimalID: M00301599 Inpp1hom

#### **Tissue Preservation and Staining:**

Thyroid gland is not present in section. Mesenteric lymph nodes are not present within the section. One of the eyes is sectioned in peripheral plane. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

## **Histopathology Findings:**

## liver (MA:0000358)

#### **Histopath Description:**

The overall hepatic lobular architecture is normal. Approximately 50% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid).

## Morphological Diagnosis:

Distribution: Multifocal; Severity: mild; MPATH Diagnosis: lipid deposition MPATH:42

#### **Definitive Diagnosis:**

Hepatic lipidosis.

# **Histopathology Comments:**

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTSI, consistent with high lipid diet.

## brain (MA:0000168)

#### **Histopath Description:**

There is a mild enlargement of the lateral ventricle.

## **Morphological Diagnosis:**

Severity: mild; MPATH Diagnosis: hydrocephalus MPATH:639

#### **Definitive Diagnosis:**

hydrocephalus, lateral ventricle

#### **Histopathology Comments:**

Variable degree of hydrocephalus is observed in a proportion of wild type C57 Black 6 mice.

#### Organ/Tissue Analyzed:

NSF will be appended

## AnimalID: M00301723 Inpp1 hom

#### **Tissue Preservation and Staining:**

Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

#### **Histopathology Findings:**

## liver (MA:0000358)

## **Histopath Description:**

The overall hepatic lobular architecture is normal. Approximately 5% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid). There are rare foci of neutrophilic clusters with rare nuclear fragments.

## **Morphological Diagnosis:**

Distribution: Multifocal; Severity: mild; MPATH Diagnosis: lipid deposition MPATH:42

#### **Definitive Diagnosis:**

Hepatic lipidosis.

## **Histopathology Comments:**

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTSI, consistent with high lipid diet.

## skin (MA:0000151)

# **Histopath Description:**

Hair follicles are in arrested phase (telogen) and there prominent diffuse dermal fibrosis

## **Morphological Diagnosis:**

Distribution: Diffuse; Severity: moderate; MPATH Diagnosis: fibrosis MPATH:181

## **Definitive Diagnosis:**

Dermal fibrosis

#### **Histopathology Comments:**

Thick dermal fibrosis is usually seen in male mice during telogen phase.

## Organ/Tissue Analyzed:

NSF will be appended

## AnimalID: M00301724 Inpp1 hom

## **Tissue Preservation and Staining:**

There is no thryroid gland in the section examined. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

## **Histopathology Findings:**

## lung (MA:0000415)

# **Histopath Description:**

There is a focal peribronchiolar aggregate of mononuclear of inflammatory cells.

## **Morphological Diagnosis:**

Distribution: Focal; Severity: mild; MPATH Diagnosis: inflammation MPATH:212

# **Definitive Diagnosis:**

Peribronchiolar mononuclear inflammatory aggregate.

## lymph node (MA:0000139)

## **Histopath Description:**

The mesenteric lymph node is enlarged (greater than three-fold). There are multiple follicles with large germinal centers. The sinuses contain large numbers of mature lymphocytes.

#### **Morphological Diagnosis:**

Duration: Sub-acute; Distribution: Diffuse; Severity: moderate; MPATH Diagnosis:

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.

## Organ/Tissue Analyzed:

NSF will be appended

#### **Summary:**

Incidental lesions attributable to diet or strain background are observed in this line.

## **Report Summary and Recommendation:**

Incidental lesions attributable to diet or strain background are observed in this line.