



# CMHD Pathology Report



## CMHD Pathology Core

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ReportID: Report Date: November 23,  
2011  
Pathologist: H. Adissu

## Mouse Genetics Project

Wellcome Trust Sanger  
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UK

CMHD LabID: N11-384

**AnimalID: M00208695 Tbd52I2 hom**

### Histopathology Findings:

#### thymus (MA:0000142)

##### Histopath Description:

There is a 150 um diameter epithelial inclusion cyst within the thymus

##### Morphological Diagnosis:

**Distribution:** Focal; **Severity:** mild; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

##### Definitive Diagnosis:

Focal epithelial inclusion cyst

#### lymph node (MA:0000139)

##### Histopath Description:

The mesenteric lymph node is enlarged (nearly 3x normal). There is a diffuse and marked increase in the paracortical and medullary areas and cellularity; these cells are organized as prominent chords, and they are larger and blast-like. Lymphoid follicles are increased in size and some have germinal centers.

##### Morphological Diagnosis:

**Distribution:** Diffuse; **Severity:** mild; **MPATH Diagnosis:** hyperplasia MPATH:134

##### Definitive Diagnosis:

Lymphoid hyperplasia

#### liver (MA:0000358)

##### Histopath Description:

There is diffuse hepatic lipidosis.

##### Morphological Diagnosis:

**Distribution:** Diffuse; **Severity:** moderate; **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 WTS1, consistent with high lipid diet. See a representative image of diffuse hepatocellular lipidosis (Snip1 WT M00383263).

**AnimalID: M00208230 Tbd52I2 hom**

### Histopathology Findings:

**liver (MA:0000358)****Histopath Description:**

The overall hepatic lobular architecture is normal. Nearly 20-30% of hepatocytes 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 lipidosi

**Histopathology Comments:**

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

**eye (MA:0000261)****Histopath Description:**

One of the eyes is markedly hypoplastic (micropthalmic); it is composed of a cavity lined by a thick layer of pigmented structure (undeveloped choroid) surrounded by a thick collagenous capsule.

**Morphological Diagnosis:**

**Distribution:** Unilateral; **Severity:** extreme; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

**Definitive Diagnosis:**

Microphtalmia, unilateral

**Histopathology Comments:**

Microphtalmia and other ocular defects are noted as incidental lesion in C57BL6/B6 mice.

**lymph node (MA:0000139)****Histopath Description:**

The mesenteric lymph node is enlarged (nearly 3x normal). There is a diffuse and marked increase in the paracortical and medullary areas and cellularity; these cells are organized as prominent chords, and they are larger and blast-like. Lymphoid follicles are increased in size and some have germinal centers.

**Morphological Diagnosis:**

**Distribution:** Diffuse; **Severity:** mild; **MPATH Diagnosis:** hyperplasia MPATH:134

**Definitive Diagnosis:**

Lymphoid hyperplasia

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**AnimalID: M00201843 Tbd52I2 hom****Histopathology Findings:****eye (MA:0000261)****Histopath Description:**

One of the eyes is markedly hypoplastic (micropthalmic); it is composed of a cavity lined by a thick layer of pigmented structure (undeveloped choroid) surrounded by a thick collagenous capsule.

**Morphological Diagnosis:**

**Distribution:** Unilateral; **Severity:** extreme; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

**Definitive Diagnosis:**

Microphtalmia, unilateral

**Histopathology Comments:**

Microphtalmia and other ocular defects are noted as incidental lesion in C57BL6/B6 mice.

**lymph node (MA:0000139)****Histopath Description:**

The architecture of two superficial cervical lymph nodes is altered by the presence of large numbers of monomorphic lymphocytes filling and distending all the sinuses and elevating the capsule. The neoplastic cells have generally a scant amount of eosinophilic cytoplasm, medium sized round central nucleus with granular chromatin and single variably distinct amphophilic nucleoli. Mitotic figures are less than 1/HPF.

**Morphological Diagnosis:**

**Distribution:** Diffuse; **MPATH Diagnosis:** lymphoma [obsolete use MPATH:516 or 535] MPATH:343

**Definitive Diagnosis:**

Lymphoma

**liver (MA:0000358)****Histopath Description:**

The overall hepatic lobular architecture is normal. Nearly 70% of hepatocytes contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid).

**Morphological Diagnosis:**

**Distribution:** Multifocal; **Severity:** moderate; **MPATH Diagnosis:** lipid deposition MPATH:42

**Definitive Diagnosis:**

Hepatic lipidosi

**Histopathology Comments:**

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

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**AnimalID: M00201942 Tbd52I2 hom****Histopathology Findings:****adrenal gland (MA:0000116)****Histopath Description:**

In one of the adrenal glands, there is a focally extensive stream of subcapsular spindle cell proliferation that segmentally displaces the superficial cortical layer.

**Morphological Diagnosis:**

**Distribution:** Focal; **Severity:** mild; **MPATH Diagnosis:** hyperplasia MPATH:134

**Definitive Diagnosis:**

Spindle cell hyperplasia.

**Histopathology Comments:**

Proliferation of subcortical spindle cells, with displacement of the cortex, is common in mice of all ages. The function of these cells is not known.

**salivary gland (MA:0000346)****Histopath Description:**

There are multiple apoptotic bodies within the granular epithelium of the submandibular salivary gland.

**Morphological Diagnosis:**

**Distribution:** Multifocal; **Severity:** mild; **MPATH Diagnosis:** apoptosis MPATH:3

**Definitive Diagnosis:**

Glandular epithelial apoptosis/necrosis

**Histopathology Comments:**

The lesion is uncommon and the cause is not evident.

**Report Summary and Recommendation:**

Liver: Lipid depletion - MPATH: 52