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CMHD Pathology Report

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ReportID: Report Date: not completed Pathologist: Dr. H. Adissu



Mouse Genetics Project

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CMHD LabID: N13-569

Relevant History: Phenotype: preweaning lethality

AnimalID: M00497267 (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

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).

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: M00497268 (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

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).

salivary gland (MA:0000346)

Histopath Description: There are multifocal perivascular mononuclear inflammatory cell aggregates. Morphological Diagnosis: Distribution: multifocal; Severity: mild;

Definitive Diagnosis: Interstitial inflammatory aggregates

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: M00507532 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description: minimal lipidosis Morphological Diagnosis:

Distribution: multifocal; Severity: mild;

Definitive Diagnosis: minimal hepatic steatosis

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;

Definitive Diagnosis: accessory adrenal cortical tissue

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

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: M00507531 (Female) Histopathology Findings:

liver (MA:0000358)

Histopath Description: moderate lipidosis

Morphological Diagnosis: Distribution: multifocal; Severity: moderate;

Definitive Diagnosis: moderate hepatic steatosis

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;

Definitive Diagnosis: accessory adrenal cortical tissue

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).

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 are incidental or attributable to diet or strain background. There are no lesions that are predictive of preweaning lethality in homozygous mice. Postnatal analysis of homozygous mice may reveal causes of mortality.