MicroCT E18.5 IMPC_EMA_001

Purpose

To assess morphological defects in E18.5 embryos from lethal or subviable strains with MicroCT.

Experimental Design

- Set up timed matings with heterozygous mice
- Day 0 is defined as the midpoint of the prior dark cycle following the identification of a copulation plug.
- Collect embryos at E18.5 with 3 minimum homozygous and 1 littermate control
- Ensure embryos are bleed as much as possible.
- Reconstruct the scans according to manufacturer's instructions.

Procedure

1. **Set up timed mating with heterozygous animals. Dissect and collect >=3 homozygote embryos.**
2. **Process the embryos using the centre's staining and embedding protocol . Centre-specific methods are recorded within a document**
3. **Scan and generate reconstructions of embryos.**

Notes

Embryos may be processed for Histopathology.

Parameters and Metadata

Embryo reconstruction IMPC_EMA_001_001 | v1.1

seriesMediaParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** false

Increments: Minimum 1

Experimenter ID IMPC_EMA_002_001 | v1.0

procedureMetadata

Req. Analysis: false **Req. Upload:** true **Is Annotated:** false

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Equipment ID IMPC_EMA_003_001 | v1.0

procedureMetadata

Req. Analysis: false **Req. Upload:** true **Is Annotated:** false

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Equipment Manufacturer IMPC_EMA_004_001 | v1.0

procedureMetadata

Req. Analysis: false **Req. Upload:** true **Is Annotated:** false

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Equipment Model IMPC_EMA_005_001 | v1.0

procedureMetadata

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Equipment Version IMPC_EMA_006_001 | v1.0

procedureMetadata

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Image Pixel Size IMPC_EMA_007_001 | v1.0

procedureMetadata

Req. Analysis: false **Req. Upload:** true **Is Annotated:** false

Unit Measured: µm

E18.5 MicroCT Preparation protocol IMPC_EMA_008_001 | v1.0

procedureMetadata

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Date equipment last calibrated IMPC_EMA_009_001 | v1.0

procedureMetadata

Req. Analysis: false **Req. Upload:** false **Is Annotated:** false

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Date of Sacrifice IMPC_EMA_010_001 | v1.0

procedureMetadata

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Date Preparation Finished IMPC_EMA_011_001 | v1.0

procedureMetadata

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Date of Scan IMPC_EMA_012_001 | v1.0

procedureMetadata

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Source Voltage IMPC_EMA_013_001 | v1.0

procedureMetadata

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Unit Measured: kV

Source Current IMPC_EMA_014_001 | v1.1

procedureMetadata

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Unit Measured: uA

Object to Source IMPC_EMA_015_001 | v1.0

procedureMetadata

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Unit Measured: mm

Camera to Source IMPC_EMA_016_001 | v1.1

procedureMetadata

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Unit Measured: mm

Screenshots IMPC_EMA_017_001 | v1.1

seriesMediaParameter

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Increments: Minimum 1