MicroCT E14.5-E15.5 IMPC_EMO_001

Purpose

To assess morphological defects in E14.5-E15.5 embryos from lethal 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 E14.5 or E15.5 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_EMO_001_001 | v1.2

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<thead>
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<th>seriesMediaParameter</th>
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<td>Req. Upload: true</td>
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<td>Is Annotated: false</td>
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<td>Increments: Minimum 1</td>
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**Image Pixel Size**  
*IMPC_EMO_007_001 | v1.0*

**Procedure Metadata**

**Unit Measured:** µm

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**E14.5-E15.5 MicroCT Preparation Protocol**  
*IMPC_EMO_008_001 | v1.0*

**Procedure Metadata**

**Unit Measured:** mm

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**Object to Source**  
*IMPC_EMO_009_001 | v1.0*

**Procedure Metadata**

**Unit Measured:** mm
**Camera to Source**  IMPC_EMO_010_001 | v1.0

*procedureMetadata*

Req. Upload: true

Unit Measured: mm

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**Date equipment last calibrated**  IMPC_EMO_011_001 | v1.0

*procedureMetadata*

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**Date of Sacrifice**  IMPC_EMO_012_001 | v1.0

*procedureMetadata*

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**Date Preparation Finished**  IMPC_EMO_013_001 | v1.0

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Source Voltage: IMPC_EMO_015_001 | v1.1

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  Unit Measured: kV

Source Current: IMPC_EMO_016_001 | v1.0

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  Unit Measured: uA

Screenshots: IMPC_EMO_017_001 | v1.1

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  Increments: Minimum 1