

# MicroCT E9.5 IMPC\_EML\_001

## Purpose

To assess morphological defects in E9.5 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 E9.5 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  $\geq 3$  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

**Source Current** IMPC\_EML\_016\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: uA

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# Camera to Source IMPC\_EML\_010\_001 | v1.0

procedureMetadata

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

Unit Measured: mm

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# E9.5 MicroCT Preparation protocol IMPC\_EML\_008\_001 | v1.0

procedureMetadata

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

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# Experimenter ID IMPC\_EML\_002\_001 | v1.0

procedureMetadata

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

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# Equipment Version IMPC\_EML\_006\_001 | v1.0

procedureMetadata

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

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**Date equipment last calibrated** IMPC\_EML\_011\_001 | v1.0

procedureMetadata

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

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**Screenshots** IMPC\_EML\_017\_001 | v1.1

seriesMediaParameter

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

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**Source Voltage** IMPC\_EML\_015\_001 | v1.1

procedureMetadata

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

Unit Measured: kV

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**Equipment Manufacturer** IMPC\_EML\_004\_001 | v1.0

procedureMetadata

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

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**Date of Sacrifice** IMPC\_EML\_012\_001 | v1.0

procedureMetadata

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

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**Date Preparation Finished** IMPC\_EML\_013\_001 | v1.0

procedureMetadata

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

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**Embryo reconstruction** IMPC\_EML\_001\_001 | v1.2

seriesMediaParameter

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

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**Equipment ID** IMPC\_EML\_003\_001 | v1.0

procedureMetadata

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

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**Date of Scan** IMPC\_EML\_014\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Equipment Model** IMPC\_EML\_005\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Object to Source** IMPC\_EML\_009\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: mm

**Image Pixel Size** IMPC\_EML\_007\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured:  $\mu\text{m}$