

# 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 bled 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

### Embryo reconstruction IMPC\_EMO\_001\_001 | v1.2

seriesMediaParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Increments: Minimum 1

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Equipment ID IMPC\_EMO\_003\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Equipment Manufacturer IMPC\_EMO\_004\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Equipment Model IMPC\_EMO\_005\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Image Pixel Size IMPC\_EMO\_007\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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

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## E14.5-E15.5 MicroCT Preparation protocol IMPC\_EMO\_008\_001 |

v1.0

procedureMetadata

Req. Analysis: true

Req. Upload: true

Is Annotated: false

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## Object to Source IMPC\_EMO\_009\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: mm

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: mm

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## Date equipment last calibrated IMPC\_EMO\_011\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: false

Is Annotated: false

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## Date of Sacrifice IMPC\_EMO\_012\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Date Preparation Finished IMPC\_EMO\_013\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Date of Scan IMPC\_EMO\_014\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

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## Source Voltage IMPC\_EMO\_015\_001 | v1.1

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: kV

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## Source Current IMPC\_EMO\_016\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: uA

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## Screenshots IMPC\_EMO\_017\_001 | v1.1

seriesMediaParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Increments: Minimum 1

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