OPT E9.5 IMPC_EOL_002

Purpose

To assess morphological defects in E9.5 embryos from lethal strains with OPT.

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 Mark'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

Date of Annotation IMPC_EOL_053_001 | v1.0

procedureMetadata

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

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Embryo reconstruction IMPC_EOL_001_001 | v1.1

seriesMediaParameter

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

Increments: Minimum 1

Experimenter ID IMPC_EOL_002_001 | v1.0

procedureMetadata

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

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Equipment ID IMPC_EOL_003_001 | v1.0

procedureMetadata

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

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Equipment Manufacturer IMPC_EOL_004_001 | v1.0

procedureMetadata

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

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Equipment Model IMPC_EOL_005_001 | v1.0

procedureMetadata

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

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Image Pixel Size IMPC_EOL_006_001 | v1.0

procedureMetadata

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

Unit Measured: µm

E9.5 OPT preperation protocol IMPC_EOL_007_001 | v1.0

procedureMetadata

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

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Date equipment last calibrated IMPC_EOL_008_001 | v1.0

procedureMetadata

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

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Date of Sacrifice IMPC_EOL_009_001 | v1.0

procedureMetadata

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

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Date Preparation Finished IMPC_EOL_010_001 | v1.1

procedureMetadata

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

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Date of Scan IMPC_EOL_011_001 | v1.0

procedureMetadata

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

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Screenshots IMPC_EOL_012_001 | v1.1

seriesMediaParameter

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

Increments: Minimum 1

Hindbrain IMPC_EOL_013_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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4th ventricle IMPC_EOL_014_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Mesencephalic vesicle IMPC_EOL_015_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Forebrain IMPC_EOL_016_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Telecenphalic (lateral) ventricle IMPC_EOL_017_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Rhombomeres IMPC_EOL_018_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Notochord IMPC_EOL_019_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Infundibular recess of 3rd ventricle IMPC_EOL_020_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Rathke's pouch IMPC_EOL_021_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Optic vesicle IMPC_EOL_022_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Otocyst IMPC_EOL_023_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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1st branchial arch IMPC_EOL_024_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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1st arch artery IMPC_EOL_025_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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2nd branchial arch IMPC_EOL_026_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

2nd arch artery IMPC_EOL_027_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Oropharynx IMPC_EOL_028_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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3rd branchial arch IMPC_EOL_029_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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3rd arch artery IMPC_EOL_030_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Aortic sac IMPC_EOL_031_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Common atrial chamber IMPC_EOL_032_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Atrioventricular canal IMPC_EOL_033_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Heart ventricle IMPC_EOL_034_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Primitive heart tube cardiac muscle IMPC_EOL_035_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Dorsal aorta IMPC_EOL_036_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Hepatic primordium IMPC_EOL_037_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Hindgut IMPC_EOL_038_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Forelimb bud IMPC_EOL_039_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Neural tube IMPC_EOL_040_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Caudal neuropore IMPC_EOL_041_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Somite IMPC_EOL_042_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Somite count IMPC_EOL_043_001 | v1.0

simpleParameter

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

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Delayed embryonic development IMPC_EOL_044_001 | v1.0

simpleParameter

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

Options: yes, no,

Vitelline artery IMPC_EOL_045_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Umbilical vein IMPC_EOL_046_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Foregut IMPC_EOL_047_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Midgut IMPC_EOL_048_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Pericardial cavity IMPC_EOL_049_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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Peritoneal cavity IMPC_EOL_050_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

Sinus venosus IMPC_EOL_051_001 | v1.0

simpleParameter

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

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

Annotator ID IMPC_EOL_052_001 | v1.0

procedureMetadata

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