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

**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

Equipment ID IMPC_EOL_003_001 | v1.0

Equipment Manufacturer IMPC_EOL_004_001 | v1.0

Equipment Model IMPC_EOL_005_001 | v1.0

Image Pixel Size IMPC_EOL_006_001 | v1.0
E9.5 OPT preparation protocol  IMPC_EOL_007_001 | v1.0

Date equipment last calibrated  IMPC_EOL_008_001 | v1.0

Date of Sacrifice  IMPC_EOL_009_001 | v1.0

Date Preparation Finished  IMPC_EOL_010_001 | v1.1
**Date of Scan** IMPC_EOL_011_001 | v1.0

**Screenshots** IMPC_EOL_012_001 | v1.1

**Hindbrain** IMPC_EOL_013_001 | v1.0

**Increments:** Minimum 1

**Options:** present, absent, abnormal, unobservable, ambiguous, imageOnly,
4th ventricle IMPC_EOL_014_001 | v1.0

simpleParameter


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

Mesencephalic vesicle IMPC_EOL_015_001 | v1.0

simpleParameter


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

Forebrain IMPC_EOL_016_001 | v1.0

simpleParameter


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

Telecenchphalic (lateral) ventricle IMPC_EOL_017_001 | v1.0

simpleParameter

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

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**Rhombomeres** IMPC_EOL_018_001 | v1.0

*simpleParameter*


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

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**Notochord** IMPC_EOL_019_001 | v1.0

*simpleParameter*


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

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**Infundibular recess of 3rd ventricle** IMPC_EOL_020_001 | v1.0

*simpleParameter*


Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,
**Rathke's pouch** IMPC_EOL_021_001 | v1.0

*simpleParameter*

**Optic vesicle** IMPC_EOL_022_001 | v1.0

*simpleParameter*

**Otocyst** IMPC_EOL_023_001 | v1.0

*simpleParameter*

**1st branchial arch** IMPC_EOL_024_001 | v1.0

*simpleParameter*
1st arch artery  IMPC_EOL_025_001  | v1.0

Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,
Oropharynx  IMPC_EOL_028_001  |  v1.0

simpleParameter


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

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3rd branchial arch  IMPC_EOL_029_001  |  v1.0

simpleParameter


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

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3rd arch artery  IMPC_EOL_030_001  |  v1.0

simpleParameter


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


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

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**Dorsal aorta** IMPC_EOL_036_001 | v1.0

*simpleParameter*


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

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**Hepatic primordium** IMPC_EOL_037_001 | v1.0

*simpleParameter*


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,

**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,

**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,

**Caudal neuropore** IMPC_EOL_041_001 | v1.0

*simpleParameter*
**Somite**  
IMPC_EOL_042_001 | v1.0

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

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**Somite count**  
IMPC_EOL_043_001 | v1.0

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

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**Delayed embryonic development**  
IMPC_EOL_044_001 | v1.0

**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`

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**Pericardial cavity**  IMPC_EOL_049_001 | v1.0

simpleParameter

**Peritoneal cavity**  IMPC_EOL_050_001 | v1.0

simpleParameter

**Sinus venosus**  IMPC_EOL_051_001 | v1.0

simpleParameter