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

<table>
<thead>
<tr>
<th>seriesMediaParameter</th>
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**Req. Analysis:** false  
**Req. Upload:** true  
**Is Annotated:** false

**Increments:** Minimum 1

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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 preperation 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,

**Telecenphalic (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*

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

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

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**Notochord**  
*IMPC_EOL_019_001 | v1.0*  
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**Options:** present, absent, abnormal, unobservable, ambiguous, imageOnly,

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**Infundibular recess of 3rd ventricle**  
*IMPC_EOL_020_001 | v1.0*  
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**Rathke's pouch** IMPC_EOL_021_001 | v1.0

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

**Optic vesicle** IMPC_EOL_022_001 | v1.0

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simpleParameter
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**Otocyst** IMPC_EOL_023_001 | v1.0

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

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simpleParameter
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1st arch artery  IMPC_EOL_025_001 | v1.0

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

2nd branchial arch  IMPC_EOL_026_001 | v1.0

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

2nd arch artery  IMPC_EOL_027_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,

3rd branchial arch  IMPC_EOL_029_001 | v1.0

simpleParameter


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

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


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

Common atrial chamber IMPC_EOL_032_001 | v1.0

simpleParameter


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

Atrioventricular canal IMPC_EOL_033_001 | v1.0

simpleParameter


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

Heart ventricle IMPC_EOL_034_001 | v1.0

simpleParameter

**Primitive heart tube cardiac muscle** IMPC_EOL_035_001 | v1.0

simpleParameter

Req. Analysis: false  
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Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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**Dorsal aorta** IMPC_EOL_036_001 | v1.0

simpleParameter

Req. Analysis: false  
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Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

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**Hepatic primordium** IMPC_EOL_037_001 | v1.0

simpleParameter

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Hindgut  IMPC_EOL_038_001  | v1.0

simpleParameter


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

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Forelimb bud  IMPC_EOL_039_001  | v1.0

simpleParameter


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

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Neural tube  IMPC_EOL_040_001  | v1.0

simpleParameter


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

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Caudal neuropore  IMPC_EOL_041_001  | v1.0

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**Options:**
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Vitelline artery IMPC_EOL_045_001 | v1.0

**simpleParameter**


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

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Umbilical vein IMPC_EOL_046_001 | v1.0

**simpleParameter**


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

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Foregut IMPC_EOL_047_001 | v1.0

**simpleParameter**


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

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Midgut IMPC_EOL_048_001 | v1.0

**simpleParameter**
Pericardial cavity IMPC_EOL_049_001 | v1.0

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

Peritoneal cavity IMPC_EOL_050_001 | v1.0

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

Sinus venosus IMPC_EOL_051_001 | v1.0

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