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

procedureMetadata

Req. Analysis: false Req. Upload: true Is Annotated: false Equipment ID IMPC_EOL_003_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Equipment Manufacturer IMPC_EOL_004_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Equipment Model IMPC_EOL_005_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false

Image Pixel Size IMPC_EOL_006_001 | v1.0

Req. Analysis: false	Req. Upload: true	Is Annotated: false
Unit Measured: μm		
E9.5 OPT preperation procedureMetadata	on protocol IMPC_EO	L_007_001 v1.0
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Date equipment las procedureMetadata	st calibrated IMPC_EO	L_008_001 v1.0
Req. Analysis: false	Req. Upload: false	Is Annotated: false
Date of Sacrifice IMPC_EOL_009_001 v1.0 procedureMetadata		
Req. Analysis: false	Req. Upload: true	Is Annotated: false

Req. Analysis: false	Req. Upload: true	Is Annotated: false
Date of Scan IMPC_E procedureMetadata	OL_011_001 v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Screenshots IMPC_E seriesMediaParameter	OL_012_001 v1.1	
Req. Analysis: false	Req. Upload: false	Is Annotated: false
Increments: Minimum 1		
Hindbrain IMPC_EOL_ simpleParameter	013_001 v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: true
Options: present, absent, abr	normal, unobservable, ambiguo	ous, imageOnly,

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,

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,

Forebrain IMPC_EOL_016_001 | v1.0

simpleParameter

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

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

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,		
Rhombomeres IMPC simpleParameter	C_EOL_018_001 v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: true
Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,		
Notochord IMPC_EOL_simpleParameter	_019_001 v1.0	
Req. Analysis: false	Req. Upload: false	Is Annotated: true
Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,		
Infundibular recess simpleParameter	s of 3rd ventricle IMF	PC_EOL_020_001 v1.0
Req. Analysis: false	Req. Upload: false	Is Annotated: true
Options: present, absent, abn	normal, unobservable, ambiguo	ous, imageOnly,

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, 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, Otocyst IMPC_EOL_023_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: true Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

1st branchial arch IMPC_EOL_024_001 | v1.0

Req. Analysis: false Req. Upload: true Is Annotated: true Options: present, absent, abnormal, unobservable, ambiguous, imageOnly, 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, 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,

DL_028_001 v1.0		
Req. Upload: true	Is Annotated: true	
normal, unobservable, ambiguo		
IMPC_EOL_029_001 v1.0		
Req. Upload: true	Is Annotated: true	
normal, unobservable, ambiguo	ous, imageOnly,	
3rd arch artery IMPC_EOL_030_001 v1.0 simpleParameter		
Req. Upload: false	Is Annotated: true	
Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,		
	Req. Upload: true IMPC_EOL_029_001 v1.0 Req. Upload: true c_EOL_030_001 v1.0 Req. Upload: false	

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,

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,

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,

Heart ventricle IMPC_EOL_034_001 | v1.0

simpleParameter

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

Options: present, absent, abn	ormal, unobservable, ambiguo	us, imageOnly,
Primitive heart tube simpleParameter	e cardiac muscle ім	PC_EOL_035_001 v1.0
Req. Analysis: false	Req. Upload: false	Is Annotated: true
Options: present, absent, abn	ormal, unobservable, ambiguo	
Dorsal aorta IMPC_EC simpleParameter	DL_036_001 v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: true
Options: present, absent, abn	ormal, unobservable, ambiguo	us, imageOnly,
Hepatic primordiun simpleParameter	n impc_eol_037_001 v1.	0
Req. Analysis: false	Req. Upload: false	Is Annotated: true
Options: present, absent, abn	ormal, unobservable, ambiguo	us, imageOnly,

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

Req. Analysis: false	Req. Upload: true	Is Annotated: true
Options: present, absent, ab	normal, unobservable, ambigud	ous, imageOnly,
Somite IMPC_EOL_042 simpleParameter	_001 v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: true
Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,		
Somite count IMPC_simpleParameter	EOL_043_001 v1.0	
Req. Analysis: false	Req. Upload: false	Is Annotated: false
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, 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, Foregut IMPC_EOL_047_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Options: present, absent, abnormal, unobservable, ambiguous, imageOnly,

Midgut IMPC_EOL_048_001 | v1.0

Req. Analysis: false Req. Upload: false Is Annotated: true Options: present, absent, abnormal, unobservable, ambiguous, imageOnly, Pericardial cavity IMPC_EOL_049_001 | v1.0 simpleParameter Reg. Analysis: false Reg. Upload: true Is Annotated: true Options: present, absent, abnormal, unobservable, ambiguous, imageOnly, 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
Date of Annotation IMPC_EOL_053_001 v1.0 procedureMetadata		
Req. Analysis: false	Req. Upload: true	Is Annotated: false