Gross Morphology Placenta E9.5 IMPC_GPL_001

Purpose
To assess visible morphological defects in E9.5 placentas from lethal strains

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.
- Minimum number of animals: 1 mutant of any sex
- Age at test: E9.5 and Younger
- Capture gross images (optional)
- Collect tissue and genotype embryos.

Procedure

1. Set up timed mating with heterozygous animals. Dissect at a consistent time and collect >=2 placentas from homozygote embryos. Coordination with viability screen is at the centres discretion.
2. Assess placentas according to Gross Morphology parameters.
3. Generate gross images of placentas (optional) with scored defects and control placentas.
4. Collect tissue for genotyping
5. Process placentas for Histopathology, or other imaging (OPTIONAL - depending on center pipeline)
6. Scores will be shown per placenta and split by zygosity.

Notes

All genotypes should be collected using validated assays.

Y chromosome assay required for X-linked lethal strains.

Placentas may be processed for Histopathology or 3D Imaging

Parameters and Metadata
**Placenta Development** IMPC/GPL_001_001 | v1.0

*simpleParameter*

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

**Description:** placenta_development

**Options:** normal, abnormal, unobservable,

---

**Placenta Morphology** IMPC/GPL_002_001 | v1.0

*simpleParameter*

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

**Description:** placenta_morphology

**Options:** normal, abnormal, unobservable,

---

**Placenta Vasculature** IMPC/GPL_003_001 | v1.0

*simpleParameter*

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

**Description:** placenta_vasculature

**Options:** normal, abnormal, unobservable,
Placenta Size  IMPC/GPL_004_001  | v1.0

Description: placenta_size
Options: normal, abnormal, unobservable,

Umbilical cord morphology  IMPC/GPL_005_001  | v1.0

Description: umbilical_cord_morphology
Options: normal, abnormal, unobservable,

Comment on image  IMPC/GPL_006_001  | v1.0
Images  IMPC_GPL_007_001 | v1.0


Description: images

Increments: Minimum 1

Experimenter ID  IMPC_GPL_008_001 | v1.0


Description: experimenter_id

Equipment ID  IMPC_GPL_009_001 | v1.0


Description: equipment_id

Equipment Manufacturer  IMPC_GPL_010_001 | v1.0

procedureMetadata
**Equipment Model** IMPC/GPL_011_001 | v1.0

**Fixative** IMPC/GPL_012_001 | v1.0

**Time of Dissection** IMPC/GPL_013_001 | v1.0
**Somite Stage** IMPC_GPL_014_001 | v1.0

procedureMetadata

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

Description: somite_stage

---

**Time of dark cycle start** IMPC_GPL_015_001 | v1.0

procedureMetadata

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

Description: time_of_dark_cycle_start

---

**Time of dark cycle end** IMPC_GPL_016_001 | v1.0

procedureMetadata

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

Description: time_of_dark_cycle_end
Date equipment last calibrated

**Description:** date_equipment_last_calibrated