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


Description: placenta_development

Options: normal, abnormal, unobservable,

Placenta Morphology IMPC/GPL_002_001 v1.0


Description: placenta_morphology

Options: normal, abnormal, unobservable,

Placenta Vasculature IMPC/GPL_003_001 v1.0


Description: placenta_vasculature

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

**simpleParameter**

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

**Description:** placenta_size

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

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Umbilical cord morphology  IMPC/GPL_005_001 | v1.0

**simpleParameter**

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

**Description:** umbilical_cord_morphology

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

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Comment on image  IMPC/GPL_006_001 | v1.0

**simpleParameter**

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

**Description:** comment_on_image
Images IMPC_GPL_007_001 | v1.0

seriesMediaParameter


Description: images

Increments: Minimum 1

Experimenter ID IMPC_GPL_008_001 | v1.0

procedureMetadata


Description: experimenter_id

Equipment ID IMPC_GPL_009_001 | v1.0

procedureMetadata


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

Description: somite_stage

Time of dark cycle start IMPC_GPL_015_001 | v1.0

Description: time_of_dark_cycle_start

Time of dark cycle end IMPC_GPL_016_001 | v1.0

Description: time_of_dark_cycle_end
Date equipment last calibrated

Description: date_equipment_last_calibrated