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,

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**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,

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**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

*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

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**Images** IMPC_GPL_007_001 | v1.0

**seriesMediaParameter**

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

**Description:** images

**Increments:** Minimum 1

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**Experimenter ID** IMPC_GPL_008_001 | v1.0

**procedureMetadata**

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

**Description:** experimenter_id

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**Equipment ID** IMPC_GPL_009_001 | v1.0

**procedureMetadata**

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

**Description:** equipment_id

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**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