Gross Morphology Placenta E18.5 IMPC_GPP_001

Purpose
To assess visible morphological defects in E18.5 placentas from lethal or subviable 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**: E18.5 and Older
- 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_GPP_001_001 | v1.0

*simpleParameter*

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

**Description:** placenta_development

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

**Placenta Morphology** IMPC_GPP_002_001 | v1.0

*simpleParameter*

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

**Description:** placenta_morphology

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

**Placenta Vasculature** IMPC_GPP_003_001 | v1.0

*simpleParameter*

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

**Description:** placenta_vasculature
**Options:** normal, abnormal, unobservable,

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**Placenta Size** IMPC_GPP_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_GPP_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_GPP_006_001 | v1.0

*simpleParameter*

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

*Description:* comment_on_image
Images  IMPC_GPP_007_001 | v1.0
seriesMediaParameter


Description: images
Increments: Minimum 1

Experimenter ID  IMPC_GPP_008_001 | v1.0
procedureMetadata


Description: experimenter_id

Equipment ID  IMPC_GPP_009_001 | v1.0
procedureMetadata


Description: equipment_id
Equipment Manufacturer IMPC_GPP_010_001 | v1.0

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

Description: equipment_manufacturer

Equipment Model IMPC_GPP_011_001 | v1.0

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

Description: equipment_model

Fixative IMPC_GPP_012_001 | v1.0

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

Description: fixative

Time of Dissection IMPC_GPP_013_001 | v1.0

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

Description: time_of_dissection
**Somite Stage**  IMPC_GPP_014_001 | v1.1

*procedureMetadata*

**Description:** somite_stage

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**Time of dark cycle start**  IMPC_GPP_015_001 | v1.0

*procedureMetadata*

**Description:** time_of_dark_cycle_start

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**Time of dark cycle end**  IMPC_GPP_016_001 | v1.0

*procedureMetadata*

**Description:** time_of_dark_cycle_end
**Date equipment last calibrated** IMPC_GPP_017_001 | v1.1

*procedureMetadata*

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

**Description:** date_equipment_last_calibrated

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**Placenta color** IMPC_GPP_018_001 | v1.0

*simpleParameter*

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

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