Gross Morphology Placenta E12.5 IMPC_G PM_001

Purpose
To assess visible morphological defects in E12.5 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: E12.5
- 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_GPM_001_001 | v1.0

simpleParameter


Description: placenta_development

Options: normal, abnormal, unobservable,

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Placenta Morphology IMPC_GPM_002_001 | v1.0

simpleParameter


Description: placenta_morphology

Options: normal, abnormal, unobservable,

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Placenta Vasculature IMPC_GPM_003_001 | v1.0

simpleParameter


Description: placenta_vasculature

Options: normal, abnormal, unobservable,
**Placenta Size**  IMPC_GPM_004_001 | v1.0

`simpleParameter`

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

**Description**: placenta_size

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

**Umbilical cord morphology**  IMPC_GPM_005_001 | v1.0

`simpleParameter`

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

**Description**: umbilical_cord_morphology

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

**Comment on image**  IMPC_GPM_006_001 | v1.0

`simpleParameter`

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

**Description**: comment_on_image

**Images**  IMPC_GPM_007_001 | v1.0

`seriesMediaParameter`
**Description:** images

**Increments:** Minimum 1

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**Experimenter ID**  IMPC_GPM_008_001 | v1.0

**Description:** experimenter_id

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**Equipment ID**  IMPC_GPM_009_001 | v1.0

**Description:** equipment_id

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**Equipment Manufacturer**  IMPC_GPM_010_001 | v1.0

**Description:** equipment_manufacturer
**Equipment Model**  IMPC_GPM_011_001 | v1.0

*procedureMetadata*

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

Description: equipment_model

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**Fixative**  IMPC_GPM_012_001 | v1.0

*procedureMetadata*

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

Description: fixative

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**Time of Dissection**  IMPC_GPM_013_001 | v1.0

*procedureMetadata*

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

Description: time_of_dissection

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**Somite Stage**  IMPC_GPM_014_001 | v1.1

*procedureMetadata*

Req. Analysis: false  
Req. Upload: false  
Is Annotated: false
Description: somite_stage

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**Time of dark cycle start** IMPC_GPM_015_001 | v1.0
procedureMetadata

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

Description: time_of_dark_cycle_start

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**Time of dark cycle end** IMPC_GPM_016_001 | v1.0
procedureMetadata

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

Description: time_of_dark_cycle_end

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**Date equipment last calibrated** IMPC_GPM_017_001 | v1.1
procedureMetadata

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

Description: date_equipment_last_calibrated
Placenta color IMPC_GPM_018_001 | v1.0

simpleParameter


Options: normal, abnormal, unobservable,