Gross Morphology Placenta E12.5 IMPC_GP M_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*

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

Description: placenta_development

Options: normal, abnormal, unobservable,

**Placenta Morphology** IMPC_GPM_002_001 | v1.0

*simpleParameter*

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

Description: placenta_morphology

Options: normal, abnormal, unobservable,

**Placenta Vasculature** IMPC_GPM_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_GPM_004_001 | v1.0

*simpleParameter*


Description: placenta_size

Options: normal, abnormal, unobservable,

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

*simpleParameter*


Description: umbilical_cord_morphology

Options: normal, abnormal, unobservable,

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

*simpleParameter*


Description: comment_on_image
Images IMPC_GPM_007_001 | v1.0
seriesMediaParameter


Description: images
Increments: Minimum 1

Experiment ID IMPC_GPM_008_001 | v1.0
procedureMetadata


Description: experimenter_id

Equipment ID IMPC_GPM_009_001 | v1.0
procedureMetadata


Description: equipment_id
Equipment Manufacturer  IMPC_GPM_010_001 | v1.0

Required Analysis: false  
Required Upload: true  
Is Annotated: false

Description: equipment_manufacturer

Equipment Model  IMPC_GPM_011_001 | v1.0

Required Analysis: false  
Required Upload: true  
Is Annotated: false

Description: equipment_model

Fixative IMPC_GPM_012_001 | v1.0

Required Analysis: false  
Required Upload: true  
Is Annotated: false

Description: fixative

Time of Dissection IMPC_GPM_013_001 | v1.0

Required Analysis: false  
Required Upload: true  
Is Annotated: false
**Somite Stage** IMPC_GPM_014_001 | v1.1

**Description:** time_of_dissection

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

**Description:** time_of_dark_cycle_start

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

**Description:** time_of_dark_cycle_end
Date equipment last calibrated IMPC_GPM_017_001 | v1.1

procedureMetadata


Description: date_equipment_last_calibrated

Placenta color IMPC_GPM_018_001 | v1.0

simpleParameter


Options: normal, abnormal, unobservable,