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 Morphology IMPC_GPM_002_001 | v1.0

simpleParameter


Options: unobservable, abnormal, normal,

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Comment on image IMPC_GPM_006_001 | v1.0

simpleParameter


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Images IMPC_GPM_007_001 | v1.0

seriesMediaParameter


Increments: Minimum 1

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Placenta Vasculature IMPC_GPM_003_001 | v1.0

simpleParameter


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

simpleParameter

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

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

simpleParameter

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

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**Placenta color** IMPC_GPM_018_001 | v1.0

simpleParameter

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

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

procedureMetadata
**Somite Stage** IMPC_GPM_014_001 | v1.1

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

**Equipment Manufacturer** IMPC_GPM_010_001 | v1.0

**Experimenter ID** IMPC_GPM_008_001 | v1.0
Equipment ID  IMPC_GPM_009_001  |  v1.0

Fixative  IMPC_GPM_012_001  |  v1.0

Date equipment last calibrated  IMPC_GPM_017_001  |  v1.1

Placenta Development  IMPC_GPM_001_001  |  v1.0

Time of Dissection  IMPC_GPM_013_001  |  v1.0
Equipment Model IMPC_GPM_011_001 | v1.0