

# 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  $\geq 2$  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,

---

## 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,

---

## 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,

---

## 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,

---

## Comment on image IMPC\_GPL\_006\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Description:** comment\_on\_image

---

## Images IMPC\_GPL\_007\_001 | v1.0

seriesMediaParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: images

Increments: Minimum 1

---

## Experimenter ID IMPC\_GPL\_008\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: experimenter\_id

---

## Equipment ID IMPC\_GPL\_009\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment\_id

---

## Equipment Manufacturer IMPC\_GPL\_010\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment\_manufacturer

---

## Equipment Model IMPC\_GPL\_011\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment\_model

---

## Fixative IMPC\_GPL\_012\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: fixative

---

## Time of Dissection IMPC\_GPL\_013\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: time\_of\_dissection

---

## 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 IMPC\_GPL\_017\_001 | v1.1

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Description:** date\_equipment\_last\_calibrated

---