

# 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  $\geq 2$  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

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

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

---

### **Time of dark cycle start** IMPC\_GPP\_015\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

### **Equipment Manufacturer** IMPC\_GPP\_010\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

### **Time of dark cycle end** IMPC\_GPP\_016\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

## **Equipment Model** IMPC\_GPP\_011\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

## **Fixative** IMPC\_GPP\_012\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

## **Date equipment last calibrated** IMPC\_GPP\_017\_001 | v1.1

procedureMetadata

Req. Analysis: false

Req. Upload: false

Is Annotated: false

---

## **Placenta Size** IMPC\_GPP\_004\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---

## Placenta Morphology IMPC\_GPP\_002\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---

## Placenta color IMPC\_GPP\_018\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---

## Placenta Vasculature IMPC\_GPP\_003\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---

## **Experimenter ID** IMPC\_GPP\_008\_001 | v1.0

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

---

## **Images** IMPC\_GPP\_007\_001 | v1.0

seriesMediaParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Increments:** Minimum 1

---

## **Equipment ID** IMPC\_GPP\_009\_001 | v1.0

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

---

## **Umbilical cord morphology** IMPC\_GPP\_005\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---

## **Somite Stage** IMPC\_GPP\_014\_001 | v1.1

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

---

## **Placenta Development** IMPC\_GPP\_001\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

---