

# 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

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

simpleParameter

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

Description: placenta\_development

Options: normal, abnormal, unobservable,

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

simpleParameter

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

Description: placenta\_morphology

Options: normal, abnormal, unobservable,

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## Placenta Vasculature IMPC\_GPP\_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\_GPP\_004\_001 | v1.0  
simpleParameter

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

**Description:** placenta\_size

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

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

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

**Description:** umbilical\_cord\_morphology

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

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

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

**Description:** comment\_on\_image

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

seriesMediaParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: images

Increments: Minimum 1

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: experimenter\_id

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

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment\_id

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

procedureMetadata

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

Description: equipment\_manufacturer

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

procedureMetadata

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

Description: equipment\_model

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

procedureMetadata

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

Description: fixative

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# Time of Dissection IMPC\_GPP\_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\_GPP\_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\_GPP\_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\_GPP\_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\_GPP\_017\_001 | v1.1

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

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

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

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

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

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