# Gross Morphology Placenta E9.5 IMPC\_GPL\_

# **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 >=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**

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

procedureMetadata

Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Comment on image IMPC_GPL_006_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Time of Dissection IMPC_GPL_013_001   v1.0 procedureMetadata			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Images IMPC_GPL_007_001   v1.0 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Increments: Minimum 1			

### Placenta Size IMPC\_GPL\_004\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true Options: abnormal, normal, unobservable, Somite Stage IMPC\_GPL\_014\_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Equipment ID IMPC\_GPL\_009\_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Placenta Vasculature IMPC\_GPL\_003\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Options: normal, abnormal, unobservable,

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

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true Options: normal, abnormal, unobservable, Time of dark cycle end IMPC\_GPL\_016\_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Placenta Morphology IMPC\_GPL\_002\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Options: unobservable, abnormal, normal,

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

procedureMetadata

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

Umbilical cord morphology IMPC\_GPL\_005\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Options: normal, abnormal, unobservable, Equipment Model IMPC\_GPL\_011\_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Equipment Manufacturer IMPC\_GPL\_010\_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Time of dark cycle start IMPC\_GPL\_015\_001 | v1.0 procedureMetadata

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

Experimenter ID IMP	PC_GPL_008_001   v1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: false