Fertility of Homozygous Knock-out Mice IM PC_FER_001

Purpose

To assess the fertility of homozygous knockout mice.

Experimental Design

- Minimum 1 hom x hom mating for fertile mice and minimum of 2 failed hom x hom matings attempts to proceed to secondary screen.
 - Secondary screen: Minimum 2 Hom x 1 WT or Het (Male), Minimum 2 Hom x 1 WT or Het (Female)
- Minimal age at test = minimal age at start of procedure = 8 weeks.
- Maximum age at test = To be confirmed, proposed 14 weeks
- Minimum length of test (time mice left in mating) 4 6 weeks

Procedure

- 1. Homozygous mice (minimum age of 8 weeks, maximum age of 14 weeks) are mated for 4-6 weeks. Strains that produce no progeny or pregnant dams after 4 to 6 weeks progress to secondary screening.
- 2. Secondary Male Infertility Screen:
 - 1. Set up 2 separate matings: male Hom x female WT or Het
 - 1. Observe matings for 4 to 6 weeks;
 - 2. Matings that result in visibly pregnant females (confirmed by dissection) or pups will be scored MALE FERTILE.
 - 3. Matings that do not result in pregnancy will be scored MALE INFERTILITY.
- 3. Secondary Female Infertility Screen
 - 1. Set up 2 separate matings: female Hom x male WT or Het
 - 2. Observe matings for 4 to 6 weeks;
 - 1. Matings that result in visibly pregnant females (confirmed by dissection) or pups will be scored FEMALE FERTILE.
 - 2. Matings that do not result in pregnancy will be scored FEMALE INFERTILITY.

Notes

Pregnancies should be confirmed.

All annotations are based on yes/no scores.

Parameters and Metadata

Total pups with dissection (primary) IMPC_FER_005_001 | v1.5

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count Age of set up (Female screen) IMPC_FER_021_001 | v1.0 procedureMetadata Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: Weeks Total litters (primary) IMPC_FER_004_001 | v1.3 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count

Age of set up IMPC_FER_014_001 | v1.0

procedureMetadata

Req. Analysis: false	Req. Upload: true	Is Annotated: false		
Unit Measured: Weeks				
Pups born (Female Screen) IMPC_FER_010_001 v1.5 simpleParameter				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: count				
Test strain genotype IMPC_FER_016_001 v1.1 procedureMetadata				
Req. Analysis: false	Req. Upload: true	Is Annotated: false		
Options: Heterozygous, Homozygous, Wild type, Hemizygous,				
Time spent in breeding (Male screen) IMPC_FER_022_001 v1.0 procedureMetadata				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: days				

Gross Findings Male IMPC_FER_001_001 v1.4 simpleParameter				
Req. Analysis: false	Req. Upload: true	Is Annotated: true		
Options: Fertile, Infertile,				
Date of matings IMP procedureMetadata	C_FER_018_001 v1.2			
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Total pups/embryo simpleParameter	s (Female Screen)	MPC_FER_013_001 v1.2		
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: count				

Time spent in breeding IMPC_FER_015_001 | v1.2

procedureMetadata

Req. Analysis: false	Req. Upload: true	Is Annotated: false
Unit Measured: days		
Time spent in bree	ding (Female scree	n) IMPC_FER_023_001 v1.
0 procedureMetadata		
Req. Analysis: false	Req. Upload: false	Is Annotated: false
Unit Measured: days		
Age of set up (Male procedureMetadata	e screen) IMPC_FER_02	0_001 v1.1
Req. Analysis: false	Req. Upload: false	Is Annotated: false
Unit Measured: Weeks		
Total pups/embryos (Male Screen) IMPC_FER_009_001 v1.2 simpleParameter		

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

Unit Measured: count

Test strain background secondary (MGI ID) IMPC_FER_017_001 | v1.2 procedureMetadata Req. Analysis: false Req. Upload: true Is Annotated: false Pups born (Male screen) IMPC_FER_006_001 | v1.5 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count Pups born (primary) IMPC_FER_002_001 | v1.3 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count

Total matings (Male screen) IMPC_FER_007_001 | v1.4

Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count Total litters (Male screen) IMPC_FER_008_001 | v1.1 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count Total matings (primary) IMPC_FER_003_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count

Total matings (Female Screen) IMPC_FER_011_001 | v1.4

simpleParameter

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

Unit Measured: count				
Total litters (Female Screen) IMPC_FER_012_001 v1.1				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: count				
Cross Findings Fo	mala 1110 555 010 001			
simpleParameter	male IMPC_FER_019_001	v1.3		
Req. Analysis: false	Req. Upload: true	Is Annotated: true		
Options: Infertile, Fertile,				
Heterozygous - Gross Findings Male IMPC_FER_024_001 v1.0				
simpleParameter Req. Analysis: false	Req. Upload: false	Is Annotated: true		
Options: Fertile, Infertile,				

Heterozygous - Gross Findings Female IMPC_FER_025_001 | v1.0

simpleParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: true
Options: Fertile, Infertile,		