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

Gross Findings Male IMPC_FER_001_001 | v1.4

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: true **Description:** gross_findings **Options:** Fertile, Infertile, Pups born (primary) IMPC_FER_002_001 | v1.3 simpleParameter Reg. Analysis: false Reg. Upload: false Is Annotated: false Unit Measured: count **Description:** pups_born_primary_ Total matings (primary) IMPC_FER_003_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Unit Measured: count **Description:** total_matings_primary_

Total litters (primary) IMPC_FER_004_001 | v1.3

simpleParameter

Req. Analysis: false	Req. Upload: false Is Annotated: false			
Unit Measured: count				
Description: total_litters_prime	ary_			
Total pups with dissection (primary) IMPC_FER_005_001 v1.5 simpleParameter				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: count				
Description: total_pups_primary_				
Pups born (Male screen) IMPC_FER_006_001 v1.5 simpleParameter				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: count				
Description: pups_born_male_screen_				

Total matings (Male screen) IMPC_FER_007_001 | v1.4

simpleParameter

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

Unit Measured: count

Description: total_matings_male_screen_

Total litters (Male screen) IMPC_FER_008_001 | v1.1

simpleParameter

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

Unit Measured: count

Description: total_litters_male_screen_

Total pups/embryos (Male Screen) IMPC_FER_009_001 | v1.2

simpleParameter

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

Unit Measured: count

Description: total_pups_embryos_male_screen_

Pups born (Female Screen) IMPC_FER_010_001 | v1.5

simpleParameter

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

Unit Measured: count

Description: pups_born_female_screen_

.....

Total matings (Female Screen) IMPC_FER_011_001 | v1.4

simpleParameter

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

Unit Measured: count

Description: total_matings_female_screen_

......

Total litters (Female Screen) IMPC_FER_012_001 | v1.1

simpleParameter

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

Unit Measured: count

Description: total_litters_female_screen_

Total pups/embryos (Female Screen) IMPC_FER_013_001 | v1.2

simpleParameter

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

Unit Measured: count

Description: total_pups_embryos_female_screen_

Age of set up IMPC_FER_014_001 | v1.0

procedureMetadata

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

Unit Measured: Weeks

Description: age_of_set_up

.....

Time spent in breeding IMPC_FER_015_001 | v1.2

procedureMetadata

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

Unit Measured: days

Description: time_breeding

.....

Test strain genotype IMPC_FER_016_001 v1.1 procedureMetadata						
Req. Analysis: false	Req. Upload: true	Is Annotated: false				
Description: test_strain_geno	otype					
Options: Heterozygous, Wild	type, Homozygous, Hemizygou	JS,				
	ound secondary (Mo	GIID) IMPC_FER_017_001				
v1.2 procedureMetadata						
Req. Analysis: false	Req. Upload: true	Is Annotated: false				
Description: test_strain_background						
Date of matings IMP procedureMetadata	PC_FER_018_001 v1.2					
Req. Analysis: false	Req. Upload: false	Is Annotated: false				
Description: date_of_matings	S					

Gross Findings Female IMPC_FER_019_001 | v1.3

simpleParameter

Req. Analysis: false	Req. Upload: true	Is Annotated: true		
Options: Fertile, Infertile,				
	e screen) IMPC_FER_02	0_001 v1.1		
procedureMetadata				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: Weeks				
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				

Time spent in breeding (Male screen) IMPC_FER_022_001 | v1.0

Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: days				
•	ding (Female scree	n) IMPC_FER_023_001 v1.		
O procedureMetadata				
Req. Analysis: false	Req. Upload: false	Is Annotated: false		
Unit Measured: days				
Heterozygous - GrosimpleParameter	oss Findings Male II	MPC_FER_024_001 v1.0		
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, In	fertile,		