Image from jax.org

Mouse Strain Datasheet

Strain Name

Ift88 flox

MGI Gene ID MGI:3710185

Full Allele Name Ift88<tm1Bky>

Type of Allele conditional allele

Human Gene (HGNC) IFT88

Genetic Background C57BL/6J

Commercial Source Jax Mice

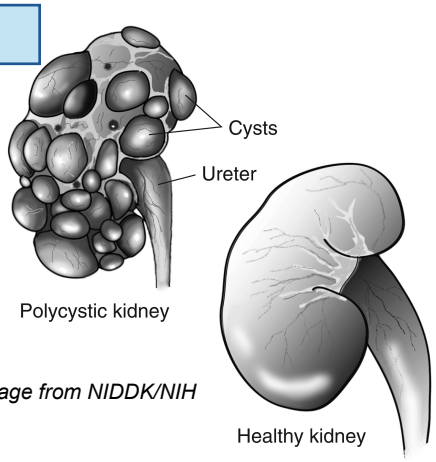

Image from NIDDK/NIH

Stock Number 022409

Link https://www.jax.org/strain/022409

Genotyping Protocol https://www.jax.org/Protocol?stockNumber=022409&protocolID=24348

Strain Details

These¬Ift88<fl>¬mice possess¬loxP¬sites flanking exons 4-6 of the intraflagellar transport 88 (Ift88) gene. Expression of Cre recombinase results in excision of these exons and generation of a null allele. This strain may be useful for studying ciliopathic human genetic diseases. Homozygous fl/fl mice are viable and fertile.

Validation or publication

https://pubmed.ncbi.nlm.nih.gov/17166921/

Contact Name Mandy Croyle

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PCR Protocol for Genotyping: Ift88 flox

A. Digestion of mouse tail or ear notch, and embryo tail (in red):

1. Add 100µL of Tissue Digestion Buffer and 2µL of Proteinase K per tail (~1-2mm length). For embryos tail add 50µL of Tissue Digestion Buffer and 1µL of Proteinase K. Make sure tail is immersed in the buffer.
2. In a thermocycler incubate at 55°C for 1 h followed by 95°C for 8 min to inactivate the enzyme and hold at 10°C. For embryos incubate at 55°C for 30 min followed by 95°C for 8 min and hold at 10°C.
3. Vortex and store at 4°C (-20°C for long storage) or use immediately to set up the PCR.

B. PCR Genotyping Protocol

Primers			
Common forward	5'-	GCCTCCTGTTTCTTGACAACAGTG	-3'
delta reverse	5'-	CTGCACCAGCCATTTCCTCTAAGTCATGTA	-3'
flox/WT reverse	5'-	GGTCCTAACAAGTAAGCCCAGTGTT	-3'
	5'-		-3'

PCR Reaction			PCR Conditions		
BioMix (Bioline)	10.0 µL		Heated Lid		105°C
Primers (@10 µM each)	0.8 µL		Initial Denaturation	94°C	5 min
			Number of Cycles	x35	
$_{dd}H_2O$	7.2 µL			94°C	20 sec
				60°C	35 sec
DNA template	2.0 µL			72°C	35 sec
Total Volume	20.0 µL		Final Extension	72°C	10 min
			Final Hold	10°C	

PCR Product Size (bp)	
Wild type band	350 bp
flox	370 bp
delta	270 bp

C. Reagents

Reagent	Cat #	Final Concentration	Working Concentration
Tissue Digestion Buffer for ear notch or tail			
Tris pH8.5		50mM	
EDTA		1mM	
Tween20		0.5%	
Proteinase K (Invitrogen)	25530-015	20mg/mL	
BioMix (Bioline)	BIO-25012		

Image from jax.org

Mouse Strain Datasheet

Strain Name

Tam-Cre; CAGGCre-ER
Tam-Cre; CAGGCre-ER

MGI Gene ID

MGI:2182767
MGI:2182767

Full Allele Name

Tg(CAG-cre/Esr1*)5Amc
Tg(CAG-cre/Esr1*)5Amc

Type of Allele

Inducible (Recombinase)
Inducible (Recombinase)

Human Gene (HGNC)

n/a
n/a

Genetic Background

C57BL/6J
C57BL/6J

Commercial Source

Jax Mice
Jax Mice

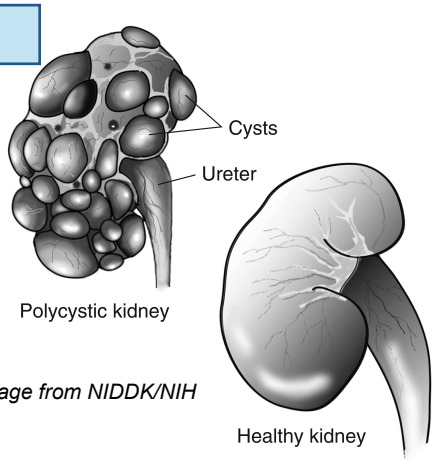

Image from NIDDK/NIH

Stock Number

4682
4682

Link

https://www.jax.org/strain/004682
https://www.jax.org/strain/004682

Genotyping Protocol

https://www.jax.org/Protocol?stockNumber=004682&protocolID=19114
https://www.jax.org/Protocol?stockNumber=004682&protocolID=19114

Strain Details

These CAGGCre-ERTM transgenic mice have a tamoxifen-inducible cre-mediated recombination system driven by the chicken beta actin promoter/enhancer coupled with the cytomegalovirus (CMV) immediate-early enhancer. Cre activity is restricted to cells/tissues of the offspring. Tamoxifen induces Cre deletion of the floxed sequences in developing embryos and mice are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities

Validation or publication

https://pubmed.ncbi.nlm.nih.gov/11944939/

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PCR Protocol for Genotyping: Tam-Cre; CAGGCre-ER Tam-Cre; CAGGCre-ER

A. Digestion of mouse tail or ear notch, and embryo tail (in red):

1. Add 100µL of Tissue Digestion Buffer and 2µL of Proteinase K per tail (~1-2mm length). For embryos tail add 50µL of Tissue Digestion Buffer and 1µL of Proteinase K. Make sure tail is immersed in the buffer.
2. In a thermocycler incubate at 55°C for 1 h followed by 95°C for 8 min to inactivate the enzyme and hold at 10°C. For embryos incubate at 55°C for 30 min followed by 95°C for 8 min and hold at 10°C.
3. Vortex and store at 4°C (-20°C for long storage) or use immediately to set up the PCR.

B. PCR Genotyping Protocol

Primers			
ForwardForward	5'-	ATT GCT GTC ACT TGG TCG TGG C	-3'
ReverseReverse	5'-	GGA AAA TGC TTC TGT CCG TTT GC	-3'
	5'-		-3'
	5'-		-3'

PCR Reaction			PCR Conditions		
BioMix (Bioline)	10.0 µL		Heated Lid		105°C
Primers (@10 µM each)	0.8 µL		Initial Denaturation	94°C	5 min
			Number of Cycles	x35	
ddH2O	7.2 µL			94°C	20 sec
				5656 °C	35 sec
DNA template	2.0 µL			72°C	35 sec
Total Volume	20.0 µL		Final Extension	72°C	10 min
			Final Hold	10°C	

PCR Product Size (bp)	
Wild type band	
Cre BandCre Band	200 bp

C. Reagents

Reagent	Cat #	Final Concentration	Working Concentration
Tissue Digestion Buffer for ear notch or tail			
Tris pH8.5		50mM	
EDTA		1mM	
Tween20		0.5%	
Proteinase K (Invitrogen)	25530-015	20mg/mL	
BioMix (Bioline)	BIO-25012		