



Image from jax.org

Mouse Strain Datasheet

Strain Name

R26FlpoER

MGI Gene ID

n/a

Full Allele Name

Gt(ROSA)26Sor<tm3(CAG-flpo/ERT2)Alj>

Type of Allele

Flp (TMX-inducible)

Human Gene (HGNC)

n/a

Genetic Background

C57BL/6J

Commercial Source

Jax Mice

Stock Number

019016

Link

<https://www.jax.org/strain/019016>

Genotyping Protocol

add link

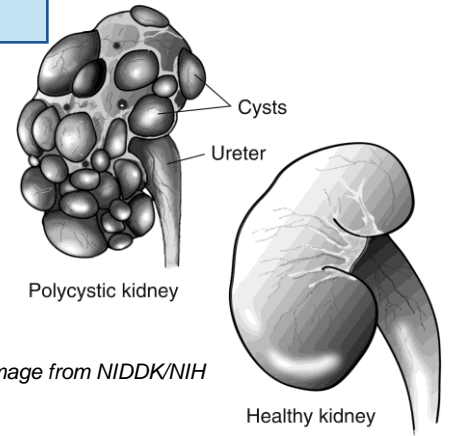


Image from NIDDK/NIH

Strain Details

R26FlpoER mice express a tamoxifen-inducible, optimized FLPe recombinase variant (Flpo). Following tamoxifen administration, efficient FLP-mediated recombination is observed in all embryonic and adult tissues.

Validation or publication

<https://pubmed.ncbi.nlm.nih.gov/22884371/>

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PCR Protocol for Genotyping:

R26FlpoER

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			
FlpO Mouse Forward	5'-	GTTCGAGAGCAGCGAGGAGGC	-3'
FlpO Mouse Reverse	5'-	CCTGGACACGCTTGTCTTGGTC	-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
ddH ₂ O	7.2 µL		94°C	20 sec
			60°C	35 sec
			72°C	35 sec
DNA template	2.0 µL		Final Extension	72°C 10 min
Total Volume	20.0 µL		Final Hold	10°C

PCR Product Size (bp)	
Wild type band	NA
FlpO	307 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		