



Image from jax.org

Mouse Strain Datasheet

Strain Name

Ksp-Cre

MGI Gene ID

MGI:2665300

Full Allele Name

Tg(Cdh16-cre)91lgr

Type of Allele

Transgenic (Recombinase)

Human Gene (HGNC)

n/a

Genetic Background

C57BL/6J

Commercial Source

Jax Mice

Stock Number

12237

Link

<https://www.jax.org/strain/012237>

Genotyping Protocol

<https://www.jax.org/Protocol?stockNumber=012237&protocolID=25023>

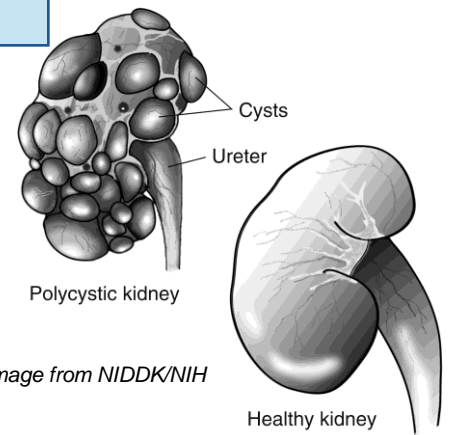


Image from NIDDK/NIH

Strain Details

These Ksp1.3/Cre transgenic mice express Cre recombinase under the control of the mouse cadherin 16 (Cdh16 or Ksp1.3) promoter. Cre recombinase expression is detected in epithelial cells of the developing kidney and genitourinary tract and in the renal tubules of adult mice. This mutant mouse strain may be useful in kidney-specific gene targeting and cell lineage studies

Validation or publication

<https://pubmed.ncbi.nlm.nih.gov/12089379/>

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PCR Protocol for Genotyping:

Ksp-Cre

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			
Forward	5'-	ATT GCT GTC ACT TGG TCG TGG C	-3'
Reverse	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
ddH ₂ O	7.2 µL		94°C	20 sec
			56°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	
Cre 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		