



Genotyping protocol

Kcnip3

IR00005370 / P5370

(ICS internal reference)

This report has been prepared by:

Christelle Roth
genotyping@igbmc.fr

This report has been validated by:

Sylvie Jacquot, PhD, Head of Genotyping Service
33 (0)3 88 65 57 44
genotyping @igbmc.fr

The first version of this report was generated the: 02 dec 2015

For any question, please contact:

Institut Clinique de la Souris - ICS - Mouse Clinical Institute
1 rue Laurent Fries, BP 10142
67404 Illkirch Cedex, France
Email: genotyping@igbmc.fr
Web site: <http://www-mci.u-strasbg.fr/>

TABLE OF CONTENTS

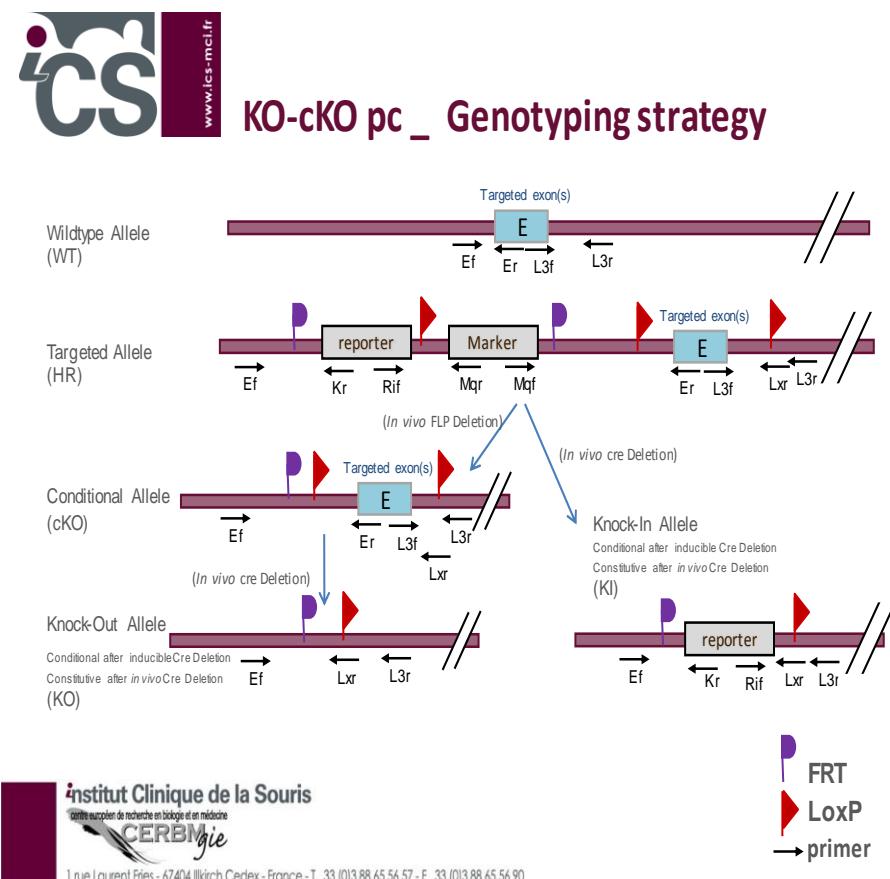
Table of contents	2
1. Genotyping protocol and data	2
1.1. Genotyping strategy.....	2
1.2. PCR protocol.....	4
2. Cre and Flp genotyping method.....	5

1. Genotyping protocol and data

This section describes the condition used at the Mouse Clinical Institute (ICS) to genotype your **Kcnip3** Constitutive Knockout / Conditional Knockout (KO-cKO x Cre) project.

1.1. Genotyping strategy

The map below describes the position of the primers used for genotyping for each possible allele.



Sequence of primers used for genotyping:

Position	Primers	Sequence
Ef	8781	GATTAAAGGCGTGTGTCACCAACACC
Er	8784	GACAATCTCTCCCATGCAGCCCTC
Kr	3278	GGGCAAGAACATAAAGTGACCCCTCC
L3f	8782	CCTCACCCAGGATCAACTCTTAGG
L3r	8783	CAAGCTGTCCTCGGACCTCCAC
Lxr	3255	ACTGATGGCGAGCTCAGACCATAAC
Ri1f	5966	GCACATGGCTGAATATCGACGGT

PCR fragments expected size (bp):

Region analyzed	Primers used	Position on the primer <i>(see the map above)</i>	Targeted allele (HR)	conditional allele (cKO)	KI allele	WildType allele
5' part of the selection marker	8781-3278	Ef / Kr	327	---	---	---
Presence of the distal loxP	8782-8783	L3f / L3r	329	329	---	306
Distal loxP specific PCR	8782-3255	L3f / Lxr	245	245	---	---
Excision of the selection marker	8781-8784	Ef / Er	7240*	336	---	189
Cre total excision	5966-3255	Ri1f / Lxr	4002*	---	471**	---

*: this PCR product will not be observed using our PCR genotyping conditions (see description below)

**: this PCR is only verified if mice are generated

---: no Amplicon should be obtained

1.2. PCR protocol

This section describes the composition of the mix and cycling conditions used for genotyping.

Reagents:

- FastStart PCR Master (Roche)
- DNA (50ng/ μ l)
- 5' primer (100 μ M)
- 3' primer (100 μ M)
- Sterile H₂O

Volume:

- 7.5 μ l
- 1.5 μ l
- 0.06 μ l
- 0.06 μ l
- up to 15 μ l

Cycling conditions:

Temp	Time	#Cycles
95°C	4min	1
94°C	30s	
62°C	30s	34
72°C	1min	
72°C	7min	1
20°C	5min	1

NB: These PCR conditions have been optimized for high-throughput genotyping. Adaptation to small-scale may be required.

2. Cre and Flp genotyping method

You will find the genotyping protocol in the publication:

[Highly-efficient, fluorescent, locus directed cre and FlpO deleter mice on a pure C57BL/6N genetic background.](#)

Birling MC, Dierich A, Jacquot S, Héault Y, Pavlovic G.
Genesis. 2012 Jun;50(6):482-9. doi:10.1002/dvg.20826. Epub 2012 Mar 20.