



## Genotyping protocol

Yipf5

IR00002874 / E145

(ICS internal reference)

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The first version of this report was generated the: 07 May 2014

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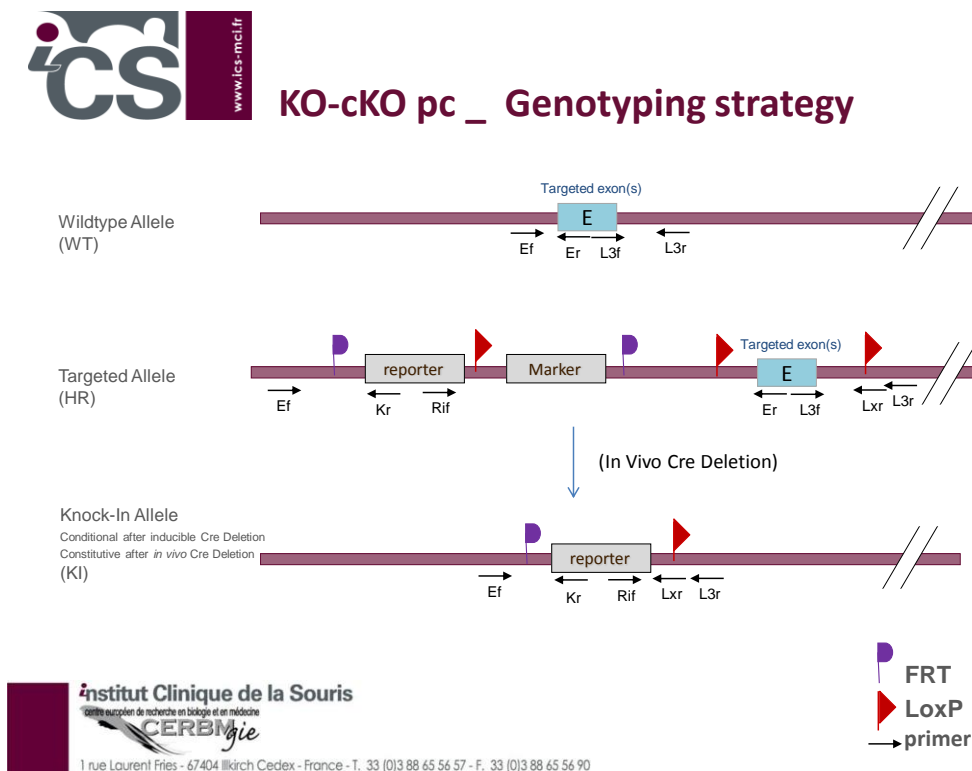
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### 1. Genotyping protocol and data

This section describes the condition used at the Mouse Clinical Institute (ICS) to genotype your **Yipf5** 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	5203	GGCAGTCCTGTTCTCTCAGTCACTT
Er	5207	GGCAAGAGAGGGACCAATCAAGCT
Kr	3209	CCAACAGCTTCCCCACAACGG
L3f	5205	TGACTACTCGCAGCAAGGCCGA
L3r	5204	CCTCCTGGTCCAATATGCACTCTCTT
Lxr	3254	TTATCATTAAATTGCGTTGCGCCATC
Lxr <sup>2</sup>	3255	ACTGATGGCGAGCTCAGACCATAAC
Rif	5966	GCACATGGCTGAATATCGACGGT

<sup>2</sup>: for a selected position, a second primer was designed

## PCR fragments expected size (bp):

Region analyzed	Primers used	Position on the primer (see the map above)	Targeted allele (HR)	conditional allele (cKO)	KI allele	WildType allele
5' part of the selection marker	5203-3209	Ef / Kr	374	---	---	---
Presence of the distal loxP (with DMSO)	5205-5204 (with 5% DMSO)	L3f / L3r	599	599	---	638
Distal loxP specific PCR	5205-3254	L3f / Lxr	351	351	---	---
Excision of the selection marker	5203-5207	Ef / Er	7503*	547	---	360
Cre total excision	5966-3255	Rif / Lxr <sup>2</sup>	---	---	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:	Volume:
- FastStart PCR Master (Roche)	7.5µl
- DNA (50ng/µl)	1.5µl
- 5' primer (100 µM)	0.06µl
- 3' primer (100 µM)	0.06µl
- Sterile H <sub>2</sub> O	up to 15 µl

### Cycling conditions:

Temp	Time	#Cycles
95°C	4min	1
94°C	30s	34
62°C	30s	
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, Hérault Y, Pavlovic G.  
Genesis. 2012 Jun;50(6):482-9. doi: 10.1002/dvg.20826. Epub 2012 Mar 20.