



Genotyping protocol

Csf2rb EUCOMM

HEPD0592_1_E04

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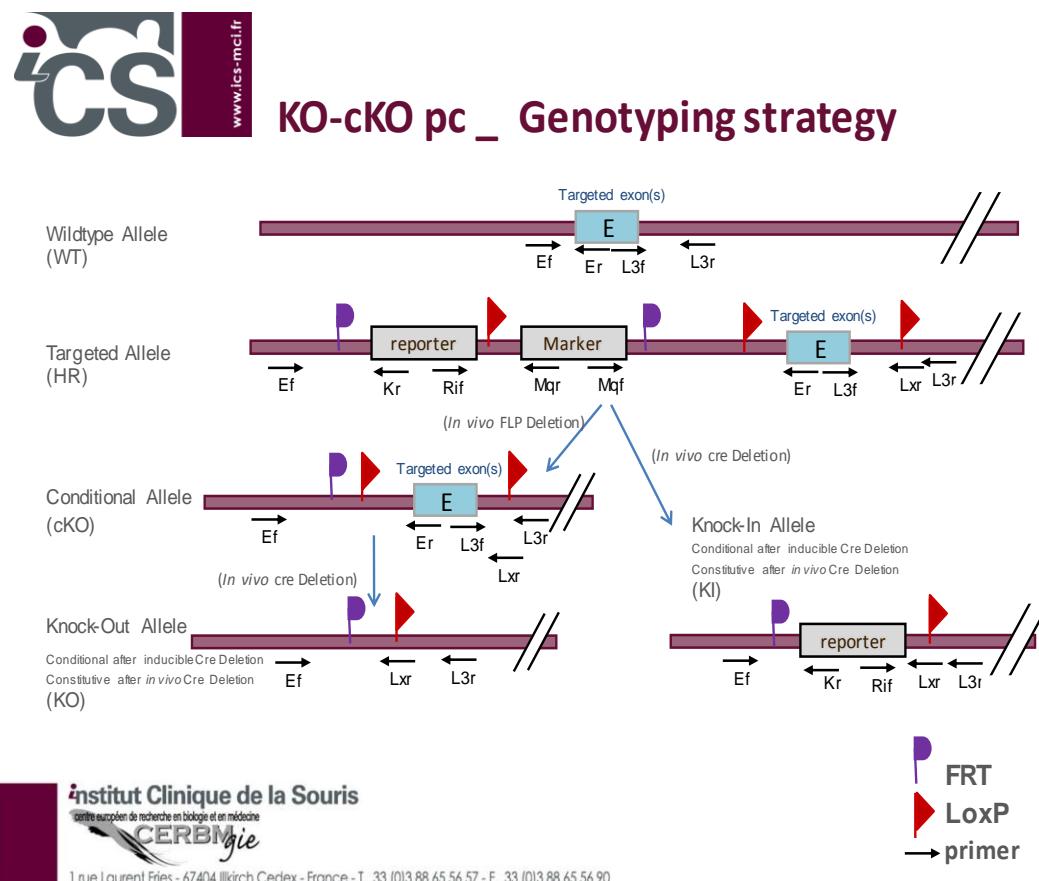
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1. Genotyping protocol and data

This section describes the condition used at the Mouse Clinical Institute (ICS) to genotype your **Csf2rb** 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	8019	CTGCACTGACGTCACAAGTGTAGG
Er	8023	CCTCCCCTTTCTGTATCTTCGC
Kr	3209	CCAACAGCTTCCCCACAACGG
L3f	8020	GACCACAATAGGTACATTGTCAGGC
L3f ²	8021	GCTCTCTTTGCTTCGCCCATG
L3r	8022	GGGACTCTTCAGACACCAGCAG
Lxr	3255	ACTGATGGCGAGCTCAGACCATAAC
Ri1f	5966	GCACATGGCTGAATATCGACGGT

²: for a selected position, a second primer was designed

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	8019-3209	Ef / Kr	313	---	---	---
Presence of the distal loxP	8020-8022	L3f / L3r	327	327	---	350
Distal loxP specific PCR	8021-3255	L3f ² / Lxr	315	315	---	---
Excision of the selection marker	8019-8023	Ef / Er	7275*	371	---	269
Cre total excision	5966-3255	Rif / Lxr	4141*	---	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.