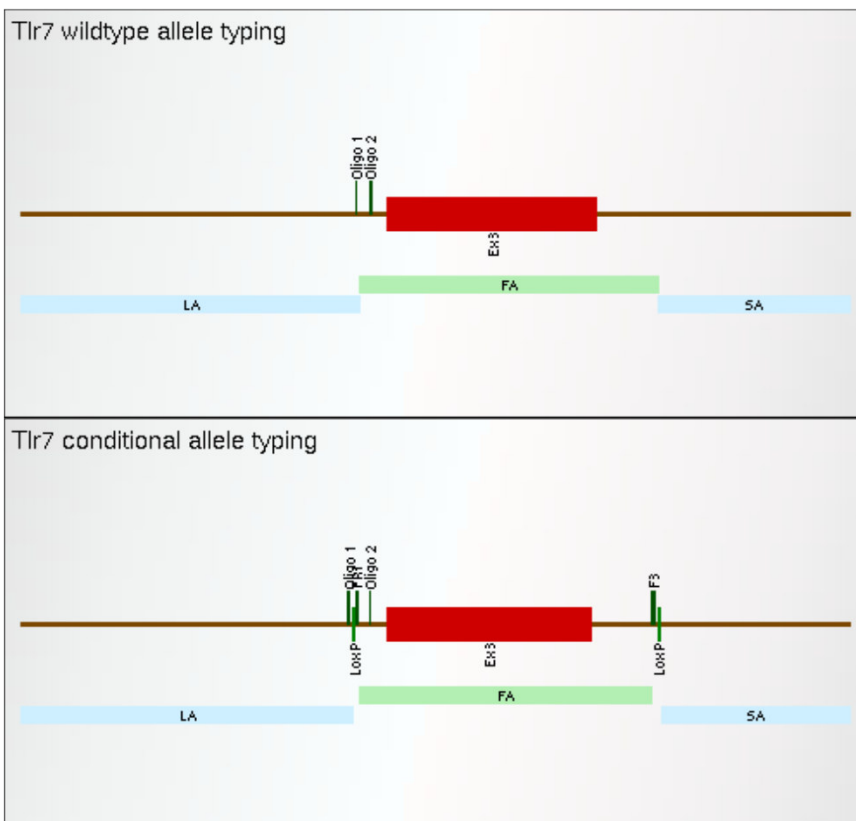


EMMA ID: 05500

Gene: *Tlr7*

Common name: *Tlr7 KO cond*

### Allele Information



### Genotyping Information

Genotyping by end-point PCR based on gel is composed of a genespecific short range PCR using primers on wild type allele and a mutant allele-specific short range PCR. The combined results show the genotype of the mice. For example: mutant positive, wild type positive = Heterozygous.

#### PCR primer pairs and expected size bands

Assay	Forward Primer	Reverse Primer	Expected Size Band (bp)
Wildtype	1518_25	1518_26	274
Mutant	the same	the same	393

#### Primer sequences

Primer Name	Sequence 5' --> 3'
1518_25	CTGTCTGCTACCATGTTTCC
1518_26	TCAGTGAGTGTGCACATACC

### PCR setup (Qiagen, Hot Start Plus)

Component	Volume ( $\mu$ l) 1x	Final conc.
DNA (~ 50-100 ng)	2	
Q-Solution (5x)	2,5	0,5
PCR-Buffer (10x)	2,5	1
DNTP mix (10 mM)	0,5	0,2
MgCl <sub>2</sub> (25 mM)	1,5	1,5
Primer 1 (10 pmol/ $\mu$ l)	1	0,4
Primer 2 (10 pmol/ $\mu$ l)	1	0,4
Taq Polymerase (5 U/ $\mu$ l)	0,3	0,06
H <sub>2</sub> O*	13,7	
Final volume	25	

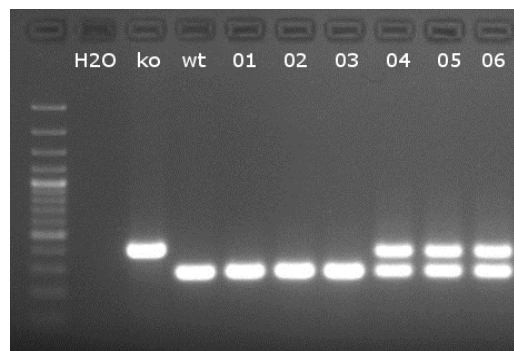
\* The amount of H<sub>2</sub>O is adjusted with the number of primer.

### Amplification conditions

PCR Settings	Temperature ( $^{\circ}$ C)	Time	# of cycles
1 Denaturation (Melting)	95 $^{\circ}$ C	5 min	1
2 Amplification (Melting, Annealing, Polym.)	94 $^{\circ}$ C	30 sec	39
	60 $^{\circ}$ C	45 sec	
	72 $^{\circ}$ C	45 sec	
3 Polymerisation	72 $^{\circ}$ C	10 min	1
4 Cooling	12 $^{\circ}$ C	hold	1

These PCR conditions have been optimized for our methods and preparation kits. Adaptions may be required.

### Gel Image



Separated by gel electrophoresis on a 2% agarose gel.