

Genotyping of KPC mouse model (*Kras*^{+/*LSL-G12D*}; *Trp53*^{+/*LSL-R172H*}; *Pdx1-Cre*)

Reagents

Platinum™ Hot Start PCR Master Mix (2X), ThermoFisher, Catalog number: 13000012

Primers

Internal Positive Control Forward – CTG TCC CTG TAT GCC TCT GGT CGT A
 Internal Positive Control Reverse – AGA TGG AGA AAG GAC TAG GCT ACA ACT TAC
 Cre Forward – GGA TCG CCA GGC GTT TTC TG
 Cre Reverse – CCA GCC ACC AGC TTG CAT GA
 LSL-Forward – AGC TAG CCA CCA TGG CTT GAG TAA GTC TGC A
 Kras Reverse – CCT TTA CAA GCG CAC GCA GAC TGT AGA
 Trp53 Reverse – CTT GGA GAC ATA GCC ACA CTG

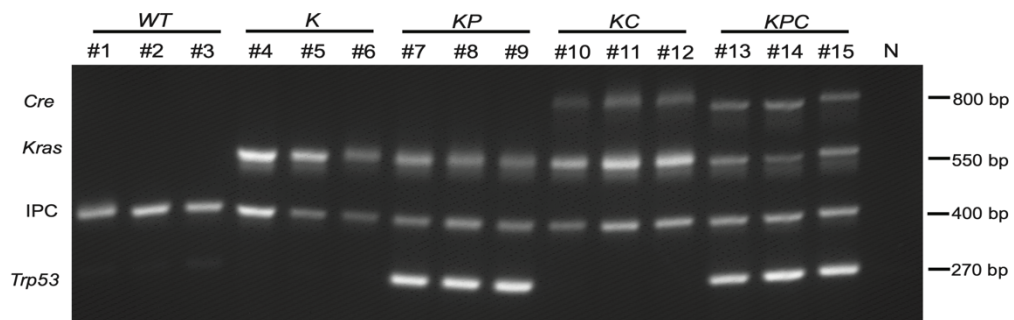
Reagents	Volume
Platinum™ Hot Start PCR Master Mix (2X)	10 µL
Internal Positive Control Forward (10 µM)	0.4 µL
Internal Positive Control Reverse (10 µM)	0.4 µL
Cre Forward (10 µM)	0.4 µL
Cre Reverse (10 µM)	0.4 µL
LSL-Forward (10 µM)	0.4 µL
<i>Kras</i> Reverse (10 µM)	0.4 µL
<i>Trp53</i> Reverse (10 µM)	0.4 µL
Template DNA	~1 µL
DI Water	Up to 20 µL
Total	20 µL

PCR Conditions

94°C 3 min
 94°C 1 min / 65°C 2 min / 72°C 1 min (40 cycles)
 72°C 3 min / 4°C ∞

Gel Electrophoresis (2% Agarose)

Cre transgene ~800 bp
LSL-Kras ~550 bp
 Internal Positive Control ~400 bp
LSL-Trp53 ~270bp



IPC: Internal Positive Control
 N: Negative Control
 K: *Kras*^{+/*LSL-G12D*}
 P: *Trp53*^{+/*LSL-R172H*}/*B*
 C: *Pdx1-Cre*

Figure 1. Example of Expected Genotyping Result