

GENOTYPING BY PCR PROTOCOL FORM

DNA Extraction Method: NaOH _____ Proteinase K Other _____

Protocol: NAME OF PCR: MC5R Gene PCR

Reagent/ Constituent	Volume (uL)
DNA Sample	5.0
2x Buffer (Proprietary Promega GoTaq Green Mix)	12.5
Primer 1 (stock concentration is 10 uM)	0.5
Primer 2 (stock concentration is 10 uM)	0.5
H2O	6.5
Additives if applicable:	
TOTAL VOLUME OF REACTION:	25 ul

Comments on protocol (e.g., different concentration of MgCl₂, etc): PCR mix is Promega# M7123

Strategy:

Steps	Temp (°C)	Time (min)	# of Cycles
1. Initiation/Melting HOT START?..CHECK HERE []	95	2:00	1
2. Denaturation	95	0:30	35
3. Annealing } steps 2-3-4 will cycle in sequence	60	0:30	35
4. Elongation	72	1:00	35
5. Amplification (i.e., 72°C, 10 min)	72	7:00	1
6. Finish (i.e., 4°C, indefinite)	10	n/a	n/a

Primers:

Primer Name	Nucleotide Sequence (5' - 3')
1: MC5R Fwd	tgg gtc tcg tca gcc tct ta
2: MC5R Rev	ggt aat agc ccc ctt cat gct

Electrophoresis Protocol:

% Agarose: 1.0 V: 120

Estimated Running Time (min): 15

Primer combination	Band (bp)	genotype
1&2	580	MC5R +
	No band	MC5R -

NOTE: For MC5R genotyping you have to run MC5R and NEO PCR reactions. Reactions have to be run separately but can be run on the same block as work with the same reaction conditions.

GENOTYPING BY PCR PROTOCOL FORM

DNA Extraction Method: NaOH _____ Proteinase K Other _____

Protocol: NAME OF PCR: _____ NEO gene PCR _____

Reagent/ Constituent	Volume (uL)
DNA Sample	5.0
2x Buffer (Proprietary Promega GoTaq Green Mix)	12.5
Primer 1 (stock concentration is 20 uM)	0.5
Primer 2 (stock concentration is 20 uM)	0.5
H2O	6.5
Additives if applicable:	
TOTAL VOLUME OF REACTION:	25 ul

Comments on protocol (e.g., different concentration of MgCl₂, etc): _adapted from Jackson Lab's Neo genotyping protocol at: http://jaxmice.jax.org/pub-cgi/protocols/protocols.sh?objtype=protocol&protocol_id=701

Strategy:

Steps	Temp (°C)	Time (min)	# of Cycles
1. Initiation/Melting HOT START?..CHECK HERE []	95	2:00	1
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4. Elongation	72	1:00	35
5. Amplification (i.e., 72°C, 10 min)	72	7:00	1
6. Finish (i.e., 4°C, indefinite)	10	n/a	n/a

Primers:

Primer Name	Nucleotide Sequence (5' - 3')
1: Neo 1	ctt ggg tgg aga ggc tat tc
2: Neo 2	agg tga gat gac agg aga tc

Electrophoresis Protocol:

% Agarose: 1.5 V: 120

Estimated Running Time (min): 20

Primer combination	Band (bp)	genotype
1&2	280	NEO
	none	WT

