

## C57BL/6-Tg(DYRK1A)36Wjs/J

Stock No: 019460

Protocol 25675: Standard PCR Assay - Tg(DYRK1A)36Wjs

Version 1.2

### Notes

This assay will NOT distinguish hemizygous from homozygous transgenic animals.

The genotyping protocol(s) presented here have been optimized for reagents and conditions used by The Jackson Laboratory (JAX). To genotype animals, JAX recommends researchers validate the assay independently upon receipt of animals into their facility. Reaction cycling temperature and times may require additional optimization based on the specific genotyping reagents used.

### Expected Results

Transgene = 380 bp

Internal positive control = 200 bp

### JAX Protocol

#### Protocol Primers

PRIMER	5' LABEL	SEQUENCE 5' → 3'	3' LABEL	PRIMER TYPE	REACTION	NOTE
15695		TTA AAC TGG TCC AGG TCT GG		Transgene Reverse	A	
oIMR5322		TAA TAC GAC TCA CTA TAG GG		Transgene Forward	A	
oIMR8744		CAA ATG TTG CTT GTC TGG TG		Internal Positive Control	A	
oIMR8745		GTC AGT CGA GTG CAC AGT TT		Internal Positive Control	A	

#### Reaction A

COMPONENT	FINAL CONCENTRATION
ddH <sub>2</sub> O	
Kapa 2G HS buffer	1.30 X
MgCl <sub>2</sub>	2.60 mM
dNTP KAPA	0.26 mM
15695	0.50 uM
oIMR5322	0.50 uM
oIMR8744	0.50 uM
oIMR8745	0.50 uM
Glycerol	6.50 %
Dye	1.00 X
Kapa 2G HS taq polym	0.03 U/ul
DNA	

#### Cycling

STEP	TEMP °C	TIME	NOTE
1	94.0	--	
2	94.0	--	
3	65.0	--	-0.5 C per cycle decrease
4	68.0	--	
5		--	repeat steps 2-4 for 10 cycles (Touchdown)
6	94.0	--	
7	60.0	--	
8	72.0	--	
9		--	repeat steps 6-8 for 28 cycles
10	72.0	--	
11	10.0	--	hold

JAX uses a very high speed Taq (~1000 bp/sec), use cycling times recommended for your reagents.

JAX uses a 'touchdown' cycling protocol and therefore has not calculated the optimal annealing temperature for each set of primers.

232775-19460 Tg mplex 8-22-14  
Tg(DYRK1A)36Wjs

