

# **PROTOCOL FOR BDNF(NT3/NT3) MOUSE GENOTYPING**

### *Procedure*

Genotyping of offspring from BDNF(NT3/NT3) breeding colony is based on PCR.

### *PCR primers*

5' forward primer (PGK) - 5' ggg aac ttc ctg act agg gg 3'  
3' reverse primer (BL1) - 5' atg aaa gaa gta aac gtc cac 3'  
3' reverse primer (BL2) - 5' cca gca gaa aga gta gag gag 3'

### *PCR profile*

95 °C, 5 min	
92 °C, 1 min	33 cycles
56 °C, 1 min	
74 °C, 2 min	
74 °C, 10 min	
4 °C, ∞	

### *PCR mix*

10 x PCR Gold buffer (Perkin Elmer)	3.0 $\mu$ l
MgCl <sub>2</sub> (25 mM)	1.5 $\mu$ l
dNTPs (10 mM)	0.5 $\mu$ l
PGK (20 $\mu$ M)	0.5 $\mu$ l
BL1 (20 $\mu$ M)	0.5 $\mu$ l
BL2 (20 $\mu$ M)	0.5 $\mu$ l
AmpliTaq Gold (5 U/ $\mu$ l)	0.2 $\mu$ l
DNA template (~ 0.5 $\mu$ g tail DNA)	2.0 $\mu$ l
ddH <sub>2</sub> O	<u>21.3 <math>\mu</math>l</u>
	30 $\mu$ l

### *Post-PCR analysis*

Load 10 µl of the PCR reaction on a 2.5 - 3% agarose gel, run on max 50V. Expected results; two bands are given ~ 350 bp for wt and ~ 480 bp for KO.