### Ins2.H2B-Apple.hGH PCR Protocol

The following conditions are used to genotype Ins2. Apple mouse genomic DNA.

# **PCR** primers:

Ins2.F1	5'-GAGGTGCTTTGGTCTATAAAGG-3' (forward)
Apple.R1	5'-GCATGAACTCCTTGATGATGG-3' (reverse)
Ins2.R1	5'-CCAAGTTACTACCACCAAGGAC-3' (reverse)

#### **PCR** reaction mixture:

```
15.8 ul sterile water
2.5 ul 10X PCR buffer with MgCl<sub>2</sub>
4 ul dNTP premix
0.75 ul forward primer (20uM)
0.75 ul reverse primer (20uM)
1 ul dil. DNA template
0.2 ul Amplitaq Gold
25 ul total volume
```

dNTP premix: Made using 100 mM NEB dNTP's. The premix contains 250 ul of each dNTP - A, C, G, &T - and 19 ml sterile water and is stable at -20°C.

# **Cycling conditions:**

```
1 cycle - 94° x 6 min.
40 cycles - 94° x 1 min., 60° x 30 sec., 72° x 1 min.
1 cycle - 72° x 7 min.
hold at 4°C.
```

### **Analysis of PCR products:**

Ins2.F1 and Apple.R1 produce a targeted band of 713 bp Ins2.F1 and Ins2.R1 produce a wildtype band of 620 bp