

## E $\mu$ myc PCR

**Note, this protocol is very prone for contamination. So it is important for a water control and exercise caution when you see a faint band.**

Use simple method for DNA extraction to minimize contamination

### **Material:**

- 10x PCR buffer
- dNTP mix, 10mM each nucleotide
- Taq Polymerase [1U/  $\mu$ l?]
- E $\mu$ myc primers:
  - pUC-1 (22mer, 5'-CAG CTG GCG TAA TAG CGA AGA G-3')
  - pUC-2 (23mer, 5'-CTG TGA CTG GTG AGT ACT CAA CC-3')
- genomic DNA [100 - 500ng/  $\mu$ l]
- 1kb DNA ladder

### **Method:**

1. Prepare a mastermix (without DNA) with a volume of 20 $\mu$ l/ sample:  
 2 $\mu$ l 10x buffer  
 15.6 $\mu$ l dH<sub>2</sub>O  
 0.4 $\mu$ l dNTP  
 0.4 $\mu$ l pUC-1  
 0.4 $\mu$ l pUC-2  
 0.2 $\mu$ l Taq polymerase  
 add 1 $\mu$ l DNA
2. PCR conditions:  
 94°C/ 5min  
 [94°C/ 1min, 64°C/ 1min, 72°C/ 1.5min] x 32  
 72°C/ 5min, 4°C/ hold

The primers detect the E $\mu$ myc transgene and generate a **830bp** product.  
 Run on a 1% agarose gel to visualize the product.