

## CD21 PCR (Mark Zabel 03.08.2004)

### **mz116:**

Neo primer near the 3' terminus (~100bp from end (3849-3869) of pIR2) :  
5' **GAC CGC TAT CAG GAC ATA GCG** 3'

```
Current Oligo, 21-mer [33]:  
Td = 66.6° [nearest neighbor method]  
Tm = 72.8° [%GC method]  
Tm = 66° [2°*(A+T) + 4°*(G+C) method]  
Mr = 6.5 k (one strand)  
Mr = 13.0 k (two strands)  
µg/OD = 46.1 (dsDNA)
```

Base	Number	and %
A	6	[28.6]
C	6	[28.6]
G	6	[28.6]
T	3	[14.3]
A + T	9	[42.9]
G + C	12	[57.1]

### **mz117b:**

forward CD21 intron 1 primer from 1418-1435 :  
5' **CAG TGT TAG TCA CTA CTC CG** 3'

```
Current Oligo, 20-mer [15]:  
Td = 54.3° [nearest neighbor method]  
Tm = 68.2° [%GC method]  
Tm = 60° [2°*(A+T) + 4°*(G+C) method]  
Mr = 6.1 k (one strand)  
Mr = 12.4 k (two strands)  
µg/OD = 47.4 (dsDNA)
```

Base	Number	and %
A	4	[20.0]
C	6	[30.0]
G	4	[20.0]
T	6	[30.0]
A + T	10	[50.0]
G + C	10	[50.0]

### **mz118br:**

reverse CD21 intron 1 primer from 1866-1845 :

5' **GCC AAA ATG AAG CAA GAA TCA G** 3'

use with mz 116 to generate ~800 bp band in the knockout, and with mz117 to generate a 400 bp band in wt.

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Lower Primer, 22-mer [54]:  
Td = 63.8° [nearest neighbor method]  
Tm = 71.3° [%GC method]  
Tm = 66° [2°*(A+T) + 4°*(G+C) method]  
Mr = 6.9 k (one strand)  
Mr = 13.6 k (two strands)  
µg/OD = 47.4 (dsDNA)
```

Base	Number	and %
A	8	[36.4]
C	4	[18.2]
G	7	[31.8]
T	3	[13.6]
A + T	11	[50.0]
G + C	11	[50.0]

### Thermocycle:

**5 min @ 95C for 1 cycle**

**30 sec @ 95C,**

**30 sec @ 58C,**

**2 min @ 72C;**

**for 33 cycles**

**5 min @ 72C for 1 cycle**