

## 7.003 Spring 2022 Day 23 Binder Gene Sequences

As outlined in the Part 5.6 experimental workflow (pg 132 – 135 in the lab manual), you have sequenced the binder variant gene from seven different miniprep plasmids (i.e. independent clones each isolated from a separate transformed bacteria colony). The DNA sequence result for these seven binder genes (Binders 1 – 7), as well as the wild-type ("WT") binder gene, are provided below.

### **WT scaffold gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAAAGTGT  
GGCGCGTGGGCCAGATGATTAGCTTTACCTATGATGAAGGCGGCGGCGCGACCGGCCGCGGCGCG  
GTGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 1 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTGGATTGACTTTGCATATGATGAAGGCGGCGGCGCGGAAAGGCTATGGCTACG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 2 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTACATTGACTTTAAATATGATGAAGGCGGCGGCGCGTACGGCTATGGCTGGG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 3 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTGGATTGACTTTGCATATGATGAAGGCGGCGGCGCGGAAAGGCTATGGCTACG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 4 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTGGATTGACTTTGCATATGATGAAGGCGGCGGCGCGGATAGGCTATGGCTACG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 5 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTGGATTGACTTTGCATATGATGAAGGCGGCGGCGCGGAAAGGCTATGGCTACG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 6 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTGGATTGACTTTGCATATGATGAAGGCGGCGGCGCGGAAAGGCTATGGCTACG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

### **Binder 7 gene sequence:**

```
GCGACCGTGAAATTTACCTATCAGGGCGAAGAAAAACAGGTGGATATTAGCAAAATTAATAATCGTGG  
CACGCGATGGCCAGTACATTGACTTTAAATATGATGAAGGCGGCGGCGCGTACGGCTATGGCTGGG  
TGAGCGAAAAAGATGCGCCGAAAGAACTGCTGCAGATGCTGGAAAAACAGAAAAAA
```

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