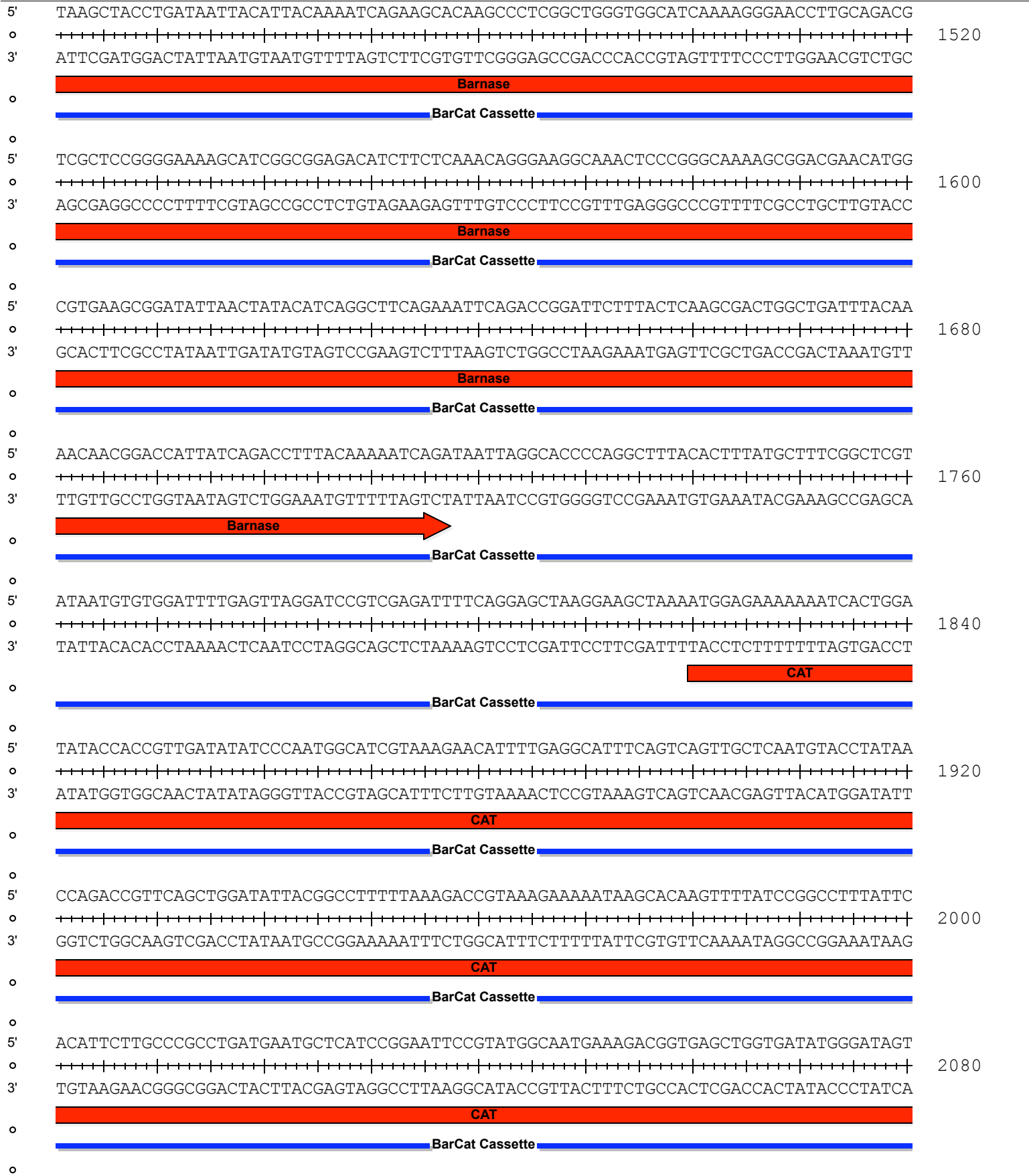


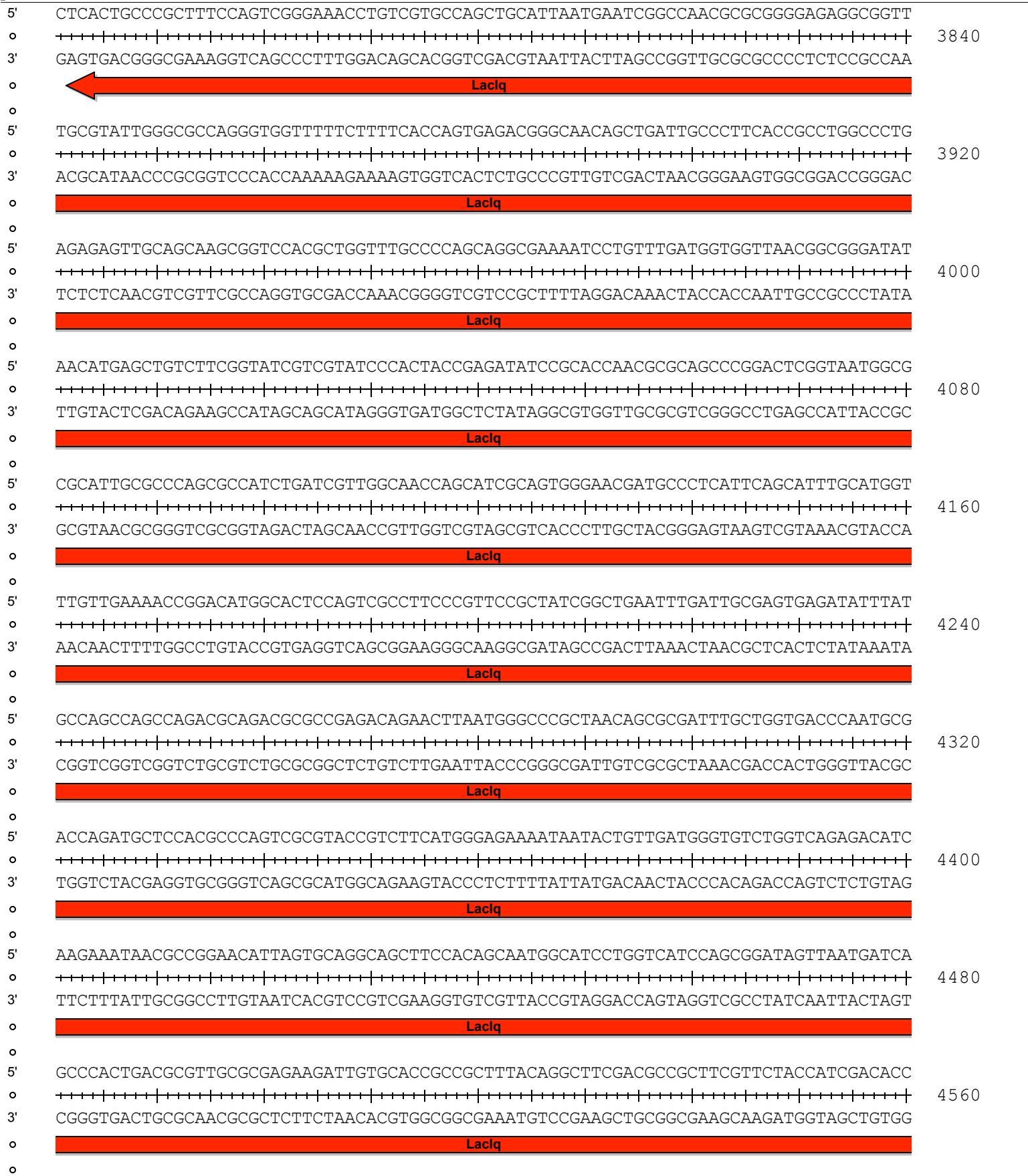
5' AAAGACGTGGGCGTGGATAACGCTGGCGCGAAAGCGGGTCTTGACCTTCCTGGTTGACCTGATTAAAAACAAACACATGAA 800  
 3' TTTCTGCACCCGCACCTATTGCGACCGCGCTTTCGCCCAGACTGGAAGGACCAACTGGACTAATTTTTGTTTGTGTACTT  
 ○ MBP  
 ○  
 5' TGCAGACACCGATTACTCCATCGCAGAAGCTGCCTTTAATAAAAGGCGAAACAGCGATGACCATCAACGGCCCGTGGGCAT 880  
 3' ACGTCTGTGGCTAATGAGGTAGCGTCTTCGACGGAAATTATTTCCGCTTTGTGCTACTGGTAGTTGCCGGGCACCCGTA  
 ○ MBP  
 ○  
 5' GGTCCAACATCGACACCAGCAAAGTGAATTATGGTGTAACGGTACTGCCGACCTTCAAGGGTCAACCATCCAAACCGTTC 960  
 3' CCAGGTTGTAGCTGTGGTCGTTTCACTTAATACCACATTGCCATGACGGCTGGAAGTTCCCAGTTGGTAGGTTTGGCAAG  
 ○ MBP  
 ○  
 5' GTTGGCGTGCTGAGCGCAGGTATTAACGCCGCCAGTCCGAACAAAGAGCTGGCAAAAGAGTTCCTCGAAAACATCTGCT 1040  
 3' CAACCGCACGACTCGCGTCCATAATTGCGGCGGTGAGGCTTGTCTCTCGACCGTTTTCTCAAGGAGCTTTTGATAGACGA  
 ○ MBP  
 ○  
 5' GACTGATGAAGGTCTGGAAGCGGTTAATAAAGACAAACCGCTGGGTGCCGTAGCGCTGAAGTCTTACGAGGAAGAGTTGG 1120  
 3' CTGACTACTTCCAGACCTTCGCCAATTATTTCTGTTTGGCGACCCACGGCATCGCGACTTCAGAATGCTCCTTCTCAACC  
 ○ MBP  
 ○  
 5' CGAAAGATCCACGTATTGCCGCCACTATGAAAAACGCCAGAAAGGTGAAATCATGCCGAACATCCCGCAGATGTCCGCT 1200  
 3' GCTTTCTAGGTGCATAACGGCGGTGATACCTTTTGCGGGTCTTCCACTTTAGTACGGCTTGTAGGGCGTCTACAGGCGA  
 ○ MBP  
 ○ MBP Forward  
 ○  
 5' TTCTGGTATGCCGTGCGTACTGCGGTGATCAACGCCGCCAGCGGTGCTCAGACTGTGATGAAGCCCTGAAAGACGCGCA 1280  
 3' AAGACCATACGGCACGCATGACGCCACTAGTTGCGGCGGTGCGCAGCAGTCTGACAGCTACTTCGGGACTTTCTGCGCGT  
 ○ MBP  
 ○ MBP Forward  
 ○  
 5' GACTTTAATTAACTGGAAGTTCTGTTCCAGGGGCCCTGTTGCCAGGTTGCTGTGAAAACCTGTACTTccaggcgatcg 1360  
 3' CTGAAATTAATTGGACCTTCAAGACAAGGTCCCCGGGACAACGGGTCCAACGACACTTTTGACATGAAggtccgctagc  
 ○  
 ○ Pac I Sgf I  
 ○  
 5' CCATGGAATAAGTAAAGGAATCACATGGCACAGGTTATCAACACGTTTGACGGGGTTGCGGATTATCTTCAGACATATCA 1440  
 3' GGTACCTTATTCATTTCTTAGTGACCGTGTTCAATAGTTGTGCAAACTGCCCAACGCCTAATAGAAGTCTGTATAGT  
 ○ Barnase  
 ○ BarCat Cassette

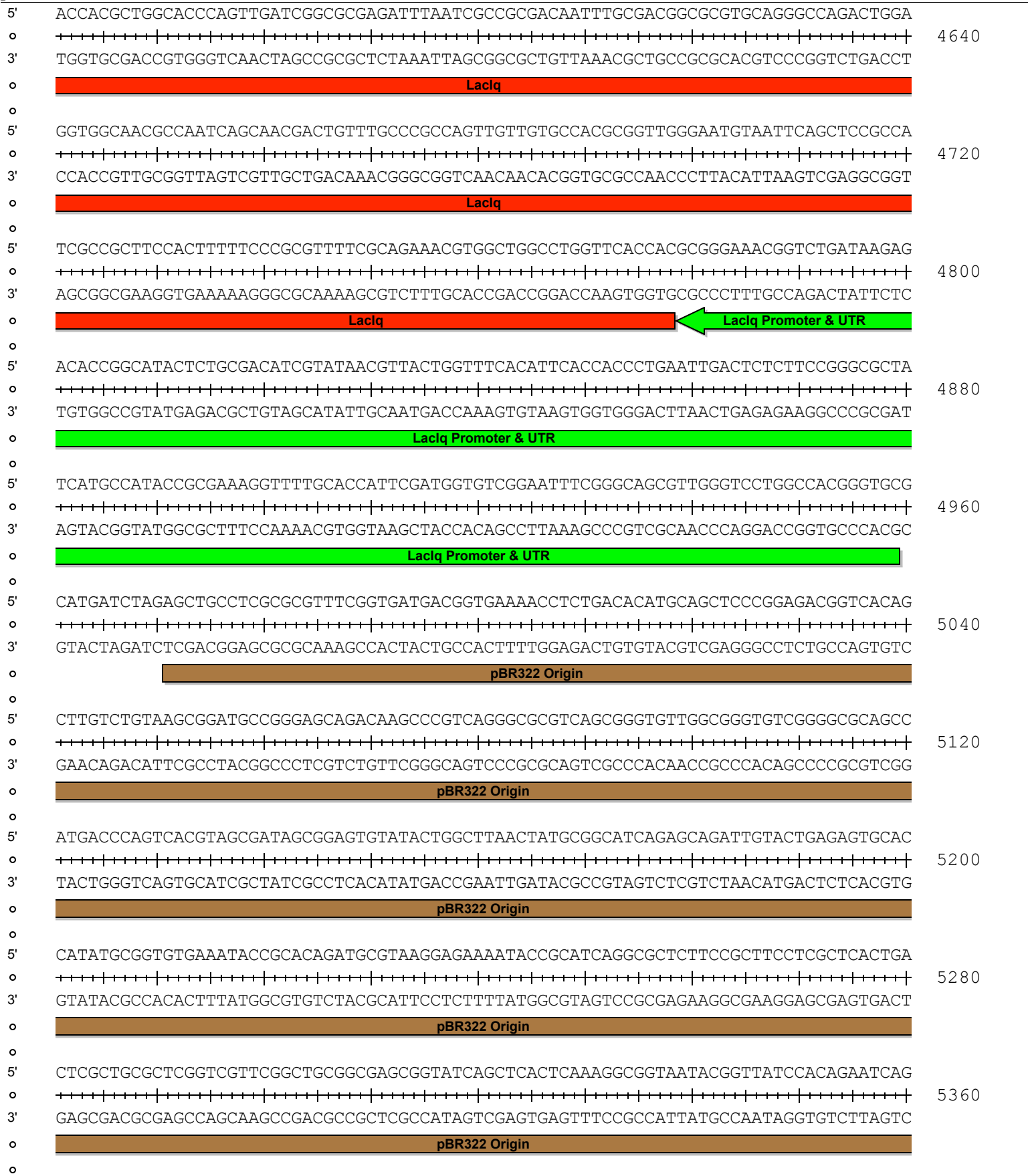
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5' GTTCACCCCTTGTTACACCGTTTTTCCATGAGCAAACGTTTTTCATCGTCTGGAGTGAATACCACGACGATTTCCG 2160  
3' CAAGTGGGAACAATGTGGCAAAAGGTACTCGTTTGACTTTGCAAAAGTAGCGAGACCTCACTTATGGTGCTGCTAAAGGC  
CAT  
BarCat Cassette  
GCAGTTTCTACACATATATTCGCAAGATGTGGCGTGTTACGGTGAAAACCTGGCCTATTTCCCTAAAGGGTTTATTGAGA 2240  
3' CGTCAAAGATGTGTATATAAGCGTTCTACACCGCACAAATGCCACTTTTGGACCGGATAAAGGGATTTCCTCAAATAACTCT  
CAT  
BarCat Cassette  
ATATGTTTTTTCGTCTCAGCCAATCCCTGGGTGAGTTTCACCAGTTTTGATTAAACGTGGCCAATATGGACAACCTTCTTC 2320  
3' TATACAAAAAGCAGAGTCGGTTAGGGACCCACTCAAAGTGGTCAAAACTAAATTTGCACCGGTTATACCTGTTGAAGAAG  
CAT  
BarCat Cassette  
Nco I  
GCCCCCGTTTTTCACCATGGGCAAATATTATACGCAAGGCGACAAGGTGCTGATGCCGCTGGCGATTTCAGGTTTCATCATGC 2400  
3' CGGGGGCAAAGTGGTACCCGTTTATAATATGCGTTCCGCTGTTCCACGACTACGGCGACCGCTAAGTCCAAGTAGTACG  
CAT  
BarCat Cassette  
CGTTTGTGATGGCTTCCATGTCGGCAGAATGCTTAATGAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAT 2480  
3' GCAAACACTACCGAAGGTACAGCCGCTTACGAATTACTTAATGTTGTCATGACGCTACTCACCGTCCCGCCCCGCATTA  
CAT  
BarCat Cassette  
Pme I  
GTTTAAACGAATTCGAGCTCGGTACCCGGGGATCCTCTAGAGTCGACCTGCAGGCATGCAAGCTGATCCGGCTGCTAACA 2560  
3' CAAATTTGCTTAAGCTCGAGCCATGGGCCCCTAGGAGATCTCAGCTGGACGTCCGTACGTTTCGACTAGGCCGACGATTGT  
pF1K Homology  
T7 Terminator Reverse  
AAGCCCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGCAAAAACTCGTTTCTCGTTTCAGCTTTCT 2640  
3' TTCGGGCTTTCTTCGACTCAACCGACGACGGTGGCGACTCGTTATTGATCGTTTTTTGAGCAAAGAGCAAGTCGAAAGA  
pF1K Homology  
Hin dIII  
TGTACAAAGTGGTGATGGCGCGCCTGTAGGACGTCGACGGTACCATCGATACGCGTTTCGAAGCTtAATAGCTgAGCTGgA 2720  
3' ACATGTTTCAACCACTACCGCGCGGACATCCTGCAGCTGCCATGGTAGCTATGCGCAAGCTTCGAaTTATCGAcTCGACcT

[illegible]





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5'	GGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTT	
o	+++++	5440
3'	CCCTATTGCGTCCTTTCTTGTACACTCGTTTTCCGGTTCGTTTTCCGGTCTTGGCATTTTTCCGGCGCAACGACCGCAAA	
o	pBR322 Origin	
o		
5'	TTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATA	
o	+++++	5520
3'	AAGGTATCCGAGGCGGGGGGACTGCTCGTAGTGTTTTTAGCTGCGAGTTTCAGTCTCCACCGCTTTGGGCTGTCTTGATAT	
o	pBR322 Origin	
o		
5'	AAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCG	
o	+++++	5600
3'	TTCTATGGTCCGCAAAGGGGGACCTTCGAGGGAGCACGCGAGAGGACAAGGCTGGGACGGCGAATGGCCTATGGACAGGC	
o	pBR322 Origin	
o		
5'	CCTTTCTCCCTTCGGGAAGCGTGGCGCTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTTCGCTCC	
o	+++++	5680
3'	GGAAAGAGGGAAGCCCTTCGCACCGCGAAAGAGTATCGAGTGCGACATCCATAGAGTCAAGCCACATCCAGCAAGCGAGG	
o	pBR322 Origin	
o		
5'	AAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCC	
o	+++++	5760
3'	TTCGACCCGACACACGTGCTTGGGGGGCAAGTCGGGCTGGCGACGCGGAATAGGCCATTGATAGCAGAACTCAGGTTGGG	
o	pBR322 Origin	
o		
5'	GGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAG	
o	+++++	5840
3'	CCATTCTGTGCTGAATAGCGGTGACCGTCGTCGGTGACCATTGTCTTAATCGTCTCGCTCCATACATCCGCCACGATGTC	
o	pBR322 Origin	
o		
5'	AGTTCTTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACC	
o	+++++	5920
3'	TCAAGAACTTCACCACCGGATTGATGCCGATGTGATCTTCCTGTCTATAAACCATAGACGCGAGACGACTTCGGTCAATGG	
o	pBR322 Origin	
o		
5'	TTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCA	
o	+++++	6000
3'	AAGCCTTTTTTCTCAACCATCGAGAACTAGGCCGTTTGTGTTGGTGGCGACCATCGCCACCAAAAAAACAACGTTTCGTTCGT	
o	pBR322 Origin	
o		
5'	GATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACT	
o	+++++	6080
3'	CTAATGCGCGTCTTTTTTTCCTAGAGTTCTTCTAGGAAACTAGAAAAGATGCCCCAGACTGCGAGTCACCTTGCTTTTGA	
o	pBR322 Origin	
o		
5'	CACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAA	
o	+++++	6160
3'	GTGCAATTCCTTAAACCAGTACTCTAATAGTTTTTCTAGAAAGTGATCTAGGAAAATTTAATTTTACTTCAAAATTT	
o	pBR322 Origin	
o		



5'	TCAATCTAAAGTATATATAGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTG	
o	+++++	6240
3'	AGTTAGATTTTCATATATACTCATTTGAACCAGACTGTCAATGGTTACGAATTAGTCACTCCGTGGATAGAGTCGCTAGAC	
o	<div><div>pBR322 Origin</div><div>Amp Resistance</div></div>	
o		
5'	TCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCA	
o	+++++	6320
3'	AGATAAAGCAAGTAGGTATCAACGGACTGAGGGGCAGCACATCTATTGATGCTATGCCCTCCCGAATGGTAGACCGGGGT	
o	<div>Amp Resistance</div>	
o		
5'	GTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAG	
o	+++++	6400
3'	CACGACGTTACTATGGCGCTCTGGGTGCGAGTGGCCGAGGTCTAAATAGTCGTTATTTGGTCGGTCGGCCTTCCCGGCTC	
o	<div>Amp Resistance</div>	
o		
5'	CGCAGAAGTGGTCTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCGCC	
o	+++++	6480
3'	GCGTCTTCACCAGGACGTTGAAATAGGCGGAGGTAGGTCAGATAATTAACAACGGCCCTTCGATCTCATTCATCAAGCGG	
o	<div>Amp Resistance</div>	
o		
5'	AGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCGTTTGGTATGGCTTCATTCA	
o	+++++	6560
3'	TCAATTATCAAACGCGTTGCAACAACGGTAACGATGTCCGTAGCACCACAGTGCAGAGCAGCAAACCATAACCGAAGTAAGT	
o	<div>Amp Resistance</div>	
o		
5'	GCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCTCG	
o	+++++	6640
3'	CGAGGCCAAGGGTTGCTAGTTCCGCTCAATGTACTAGGGGGTACAACACGTTTTTTTCGCCAATCGAGGAAGCCAGGAGGC	
o	<div>Amp Resistance</div>	
o		
5'	ATCGTTGTGAGAAGTAAGTTGGCCGAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCC	
o	+++++	6720
3'	TAGCAACAGTCTTCATTCAACCGGCGTCACAATAGTGAGTACCAATACCGTCGTGACGTATTAAGAGAATGACAGTACGG	
o	<div>Amp Resistance</div>	
o		
5'	ATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCT	
o	+++++	6800
3'	TAGGCATTCTACGAAAAGACACTGACCACTCATGAGTTGGTTCAGTAAGACTCTTATCACATACGCCGCTGGCTCAACGA	
o	<div>Amp Resistance</div>	
o		
5'	CTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCG	
o	+++++	6880
3'	GAACGGGCCGAGTTATGCCCTATTATGGCGCGGTGTATCGTCTTGAAATTTTCACGAGTAGTAACCTTTTGCAAGAAGC	
o	<div>Amp Resistance</div>	
o		
5'	GGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACCTGATCTTCAGC	
o	+++++	6960
3'	CCCGCTTTTGAGAGTTCCTAGAATGGCGACAACCTCTAGGTCAAGCTACATTGGGTGAGCACGTGGGTGACTAGAAGTCG	
o	<div>Amp Resistance</div>	
o		

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5'	ATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACAC	
o	+++++	
3'	TAGAAAATGAAAGTGGTCGCAAAGACCCACTCGTTTTTGTCTTCCGTTTTACGGCGTTTTTCCCTTATTCCCGCTGTG	7040
o	<div>Amp Resistance</div>	
o		
5'	GGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATAC	
o	+++++	7120
3'	CCTTTACAACCTTATGAGTATGAGAAGGAAAAAGTTATAATAACTTCGTAAATAGTCCCAATAACAGAGTACTCGCCTATG	
o	<div>Amp Resistance</div>	
o		
5'	ATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGA	
o	+++++	7200
3'	TATAAACTTACATAAATCTTTTTATTTGTTTATCCCCAAGGCGCGTGTAAGGGGCTTTTCACGGTGGACTGCAGATTCT	
o		
5'	AACCATTATTATCATGACATTAACCTAT	
o	+++++	7228
3'	TTGGTAATAATAGTACTGTAATTGGATA	
o		