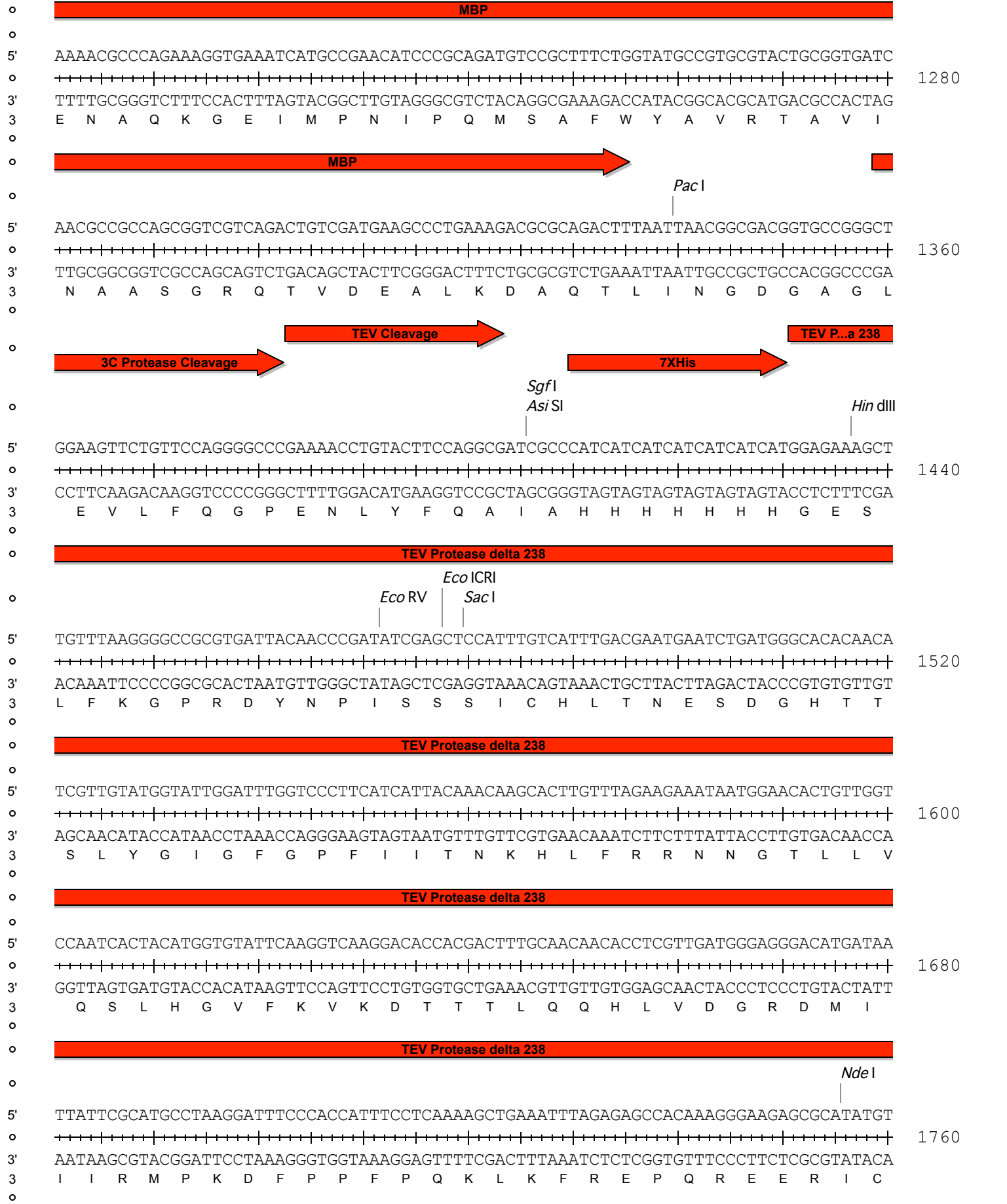
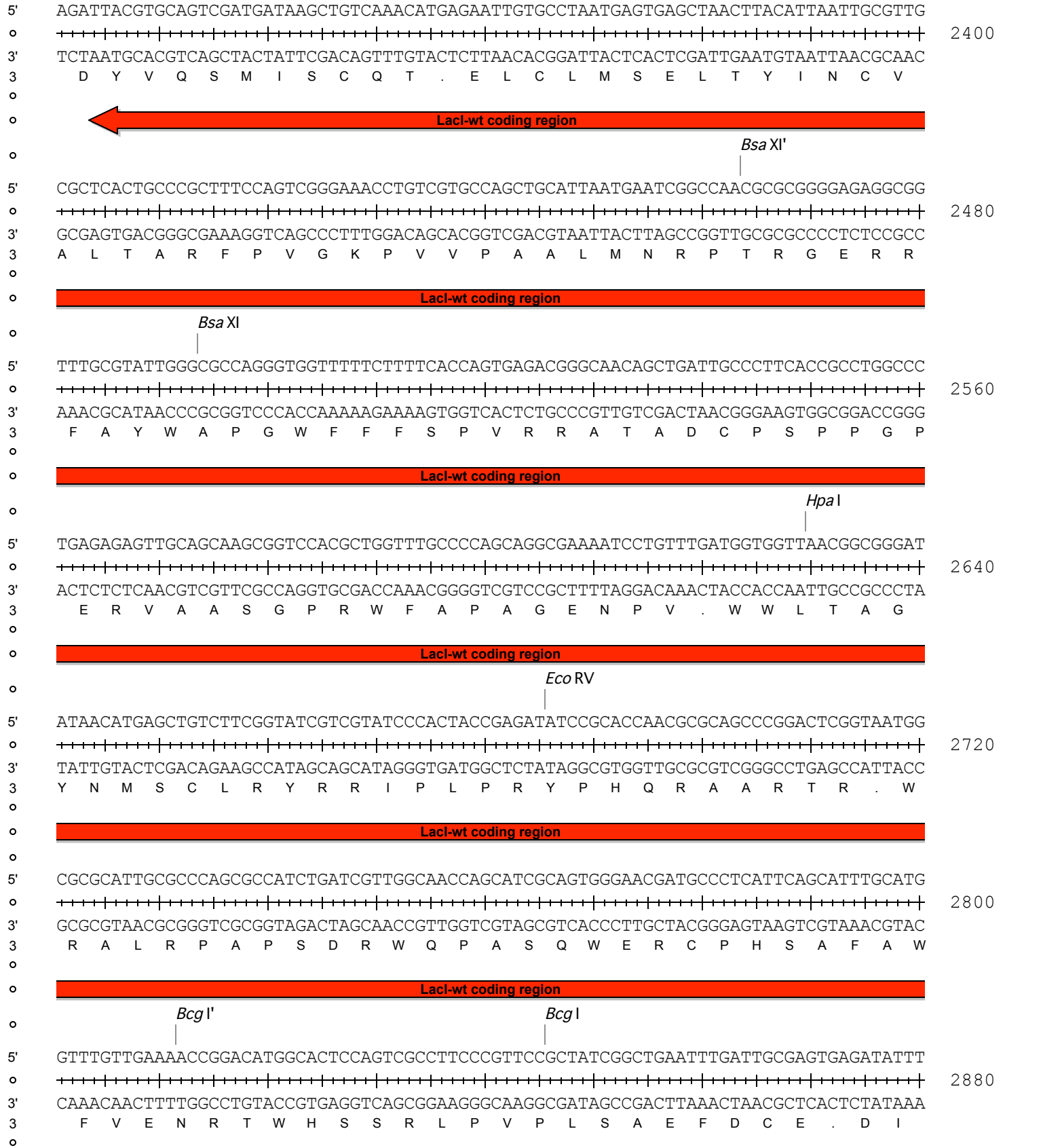


o	MBP										
o											
5'	GCTGTTGAAGCGTTATCGCTGATTTATAACAAAGATCTGCTGCCGAACCCGCCAAAAACCTGGGAAGAGATCCCGGCGCT										
o	+++++										640
3'	CGACAACTTCGCAATAGCGACTAAATATTGTTTCTAGACGACGGCTTGGGCGGTTTTTGGACCCTTCTCTAGGGCCGCGA										
3	A V E A L S L I Y N K D L L P N P P K T W E E I P A L										
o											
o	MBP										
o											
5'	GGATAAAGAACTGAAAGCGAAAGGTAAGAGCGCGCTGATGTTCAACCTGCAAGAACCGTACTTCACCTGGCCGCTGATTG										
o	+++++										720
3'	CCTATTTCTTGACTTTTCGCTTTCCATTCTCGCGCGACTACAAGTTGGACGTTCTTGGCATGAAGTGGACCGGCGACTAAC										
3	D K E L K A K G K S A L M F N L Q E P Y F T W P L I										
o											
o	MBP										
o											
5'	CTGCTGACGGGGTTATGCGTTCAAGTATGAAAACGGCAAGTACGACATTAAAGACGTGGGCGTGGATAACGCTGGCGCG										
o	+++++										800
3'	GACGACTGCCCCAATACGCAAGTTCATACTTTTGCCGTTTCATGCTGTAATTTCTGCACCCGCACCTATTGCGACCGCGC										
3	A A D G G Y A F K Y E N G K Y D I K D V G V D N A G A										
o											
o	MBP										
o											
5'	AAAGCGGGTCTGACCTTCCTGGTTGACCTGATTAAAAACAAACACATGAATGCAGACACCGATTACTCCATCGCAGAAGC										
o	+++++										880
3'	TTTCGCCCAGACTGGAAGGACCAACTGGACTAATTTTGTGTTGTGTACTTACGTCTGTGGCTAATGAGGTAGCGTCTTCG										
3	K A G L T F L V D L I K N K H M N A D T D Y S I A E A										
o											
o	MBP										
o											
5'	TGCCTTTAATAAAGGCGAAACAGCGATGACCATCAACGGCCCGTGGGCATGGTCCAACATCGACACCAGCAAAGTGAATT										
o	+++++										960
3'	ACGGAAATTATTTCCGCTTTGTGCTACTGGTAGTTGCCGGGCACCCGTACCAGTTGTAGCTGTGGTTCGTTTCACTTAA										
3	A F N K G E T A M T I N G P W A W S N I D T S K V N										
o											
o	MBP										
o											
5'	ATGGTGTAACGGTACTGCCGACCTTCAAGGGTCAACCATCCAAACCGTTTCGTTGGCGTGCTGAGCGCAGGTATTAACGCC										
o	+++++										1040
3'	TACCACATTGCCATGACGGCTGGAAGTTCCAGTTGGTAGGTTTGGCAAGCAACCGCACGACTCGCGTCCATAATTGCGG										
3	Y G V T V L P T F K G Q P S K P F V G V L S A G I N A										
o											
o	MBP										
o											
5'	GCCAGTCCGAACAAAGAGCTGGCAAAAGAGTTCTCTCGAAAACATCTGCTGACTGATGAAGGTCTGGAAGCGGTTAATAA										
o	+++++										1120
3'	CGGTACAGGCTTGTTTCTCGACCGTTTTCTCAAGGAGCTTTTGATAGACGACTGACTACTTCCAGACCTTCGCCAATTATT										
3	A S P N K E L A K E F L E N Y L L T D E G L E A V N K										
o											
o	MBP										
o											
	AfeI										
o											
5'	AGACAAACCGCTGGGTGCCGTAGCGCTGAAGTCTTACGAGGAAGAGTTGGCGAAAGATCCACGTATTGCCGCCACTATGG										
o	+++++										1200
3'	TCTGTTTGGCGACCCACGGCATCGCGACTTCAGAATGCTCCTTCTCAACCGCTTCTAGGTGCATAACGGCGGTGATACC										
3	D K P L G A V A L K S Y E E E L A K D P R I A A T M										
o											



2320

pMHTDelta238



LacI-wt coding region

LacI Mid Forward

Bst EII

5' ATGCCAGCCAGCCAGACGCGAGACGCGCCGAGACAGAACTTAATGGGCCCCGCTAACAGCGCGATTTGCTGGTGACCCAATG
 0 ++++++
 3' TACGGTCGGTCGGTCTGCGTCTGCGCGGCTCTGTCTTGAATTACCCGGGCGATTGTCTGCGCTAAACGACCACTGGGTAC
 3 Y A S Q P D A D A P R Q N L M G P L T A R F A G D P M 2960

LacI-wt coding region

5' CGACCAGATGCTCCACGCCAGTCGCGTACCGTCTTCATGGGAGAAAAATAATACTGTTGATGGGTGTCTGGTCAGAGACA 3040
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3' GCTGGTCTACGAGGTGCGGGTCAGCGCATGGCAGAAGTACCCTCTTTTATTATGACAACTACCCACAGACCAGTCTCTGT
R P D A P R P V A Y R L H G R K . Y C . W V S G Q R H

LacI-wt coding region

5' TCAAGAAATAACGCCGAACATTAGTGCAGGCAGCTTCCACAGCAATGGCATCCTGGTCATCCAGCGGATAGTTAATGAT 3120
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3' AGTTCTTTTATTGCGGCCCTTGTAATCACGTCCGTCGAAGGTGTCGTTACCGTAGGACCAGTAGGTGCGCTATCAATTACTA
Q E I T P E H . C R Q L P Q Q W H P G H P A D S

LacI-wt coding region

5' CAGCCCACTGACGCGTTGCGCGAGAAGATTGTGCACCGCCGCTTTACAGGCTTCGACGCCGCTTCGTTCTACCATCGACA
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3' GTCGGGTGACTGCGCAACGCGCTCTTCTAACACGTGGCGGCGAAATGTCCGAAGCTGCGGCGAAGCAAGATGGTAGCTGT
S A H . R V A R E D C A P P L Y R L R R R F V L P S T

3200

LacI-wt coding region

5' CCACCACGCTGGCACCCAGTTGATCGGC GCGAGATTTAATCGCCGCGACAATTTGCGACGGCGCGTGCAGGGCCAGACTG
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3' GGTGGTGCGACCGTGGGTCAACTAGCCGCGCTCTAAATTAGCGGCGCTGTTA AACCGCTGCCGCGCAGTCCC GG TCTGAC
P P R W H P V D R R E I . S P R Q F A T A R A G P D W

3280

LacI-wt coding region

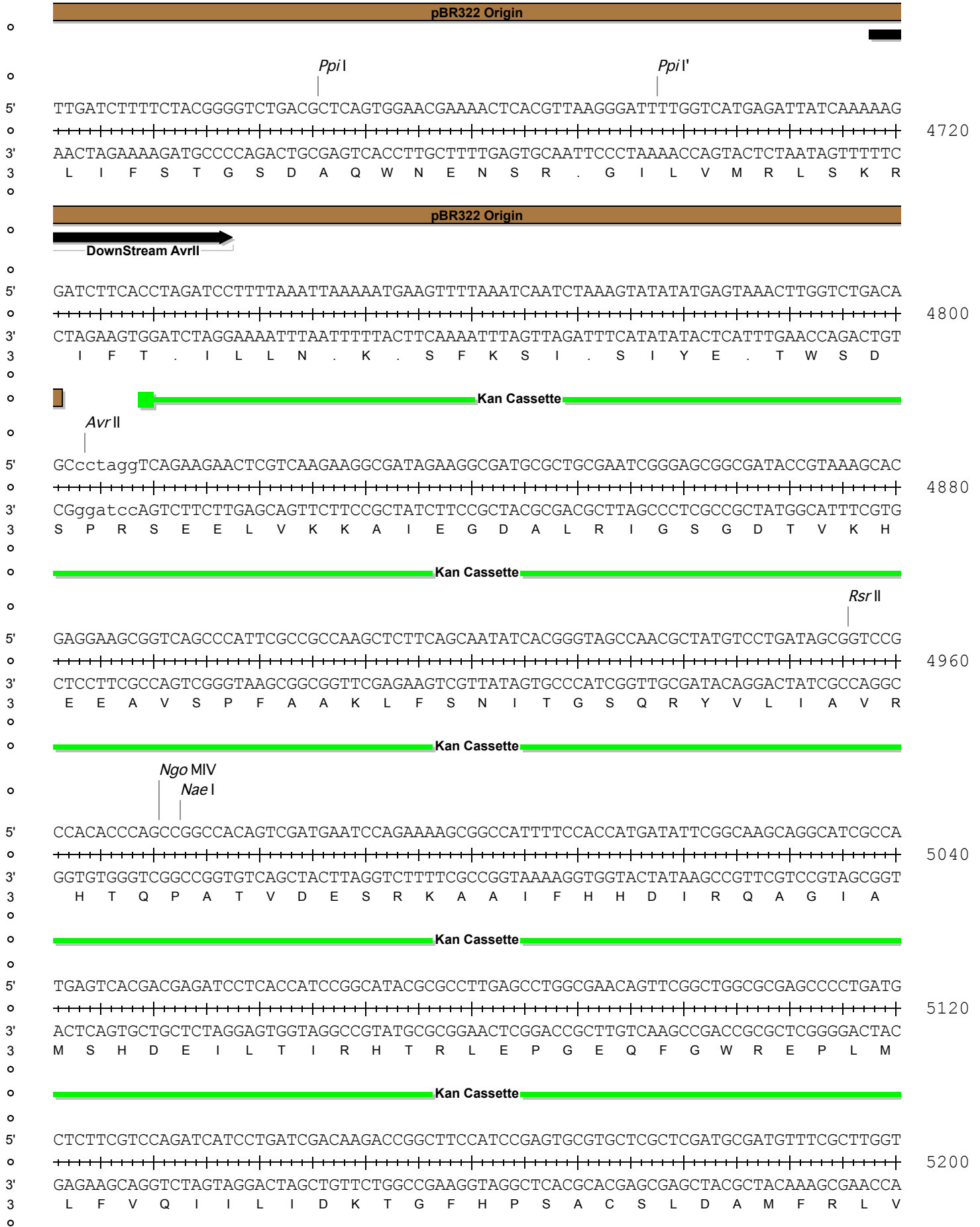
5' GAGGTGGCAACGCCAATCAGCAACGACTGTTTGCCCGCCAGTTGTTGTGCCACGCGGTTGGGAATGTAATTCAGCTCCGC
 3' CTCCACC GTT GCG GTT AGT CGT T GCT GAC AAACGGGCGGTCAACAACACGGTGCGCCAACCCCTTACATTAAGTCGAGGCG
 R W Q R Q S A T T V C P P V V V P R G W E C N S A P

LacI-wt coding region

5' CATCGCCGCTTCCACTTTTTCCCGCGTTTTTCGCAGAAACGTGGCTGGCTGGTTTCACCACGCGGGAAACGGTCTGATAAG
 3' GTAGCGGCGAAGGTGAAAAAGGGCGCAAAGCGTCTTTGCACCGACCGACCAAGTGGTGCGCCCTTTGCCAGACTATTC
 P S P L P L F P A F S Q K R G W P G S P R G K R S D K

4000

o	pBR322 Origin		
o			
5'	GCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAA		
o	+++++		4080
3'	CGTTTTCCGGTCCTTGGCATTTCGCGGCAACGACCGCAAAAAGGTATCCGAGGCGGGGGGACTGCTCGTAGTGTTTT		
3	Q K A R N R K K A A L L A F F H R L R P P D E H H K		
o	pBR322 Origin		
o			
5'	ATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTG		
o	+++++		4160
3'	TAGCTGCGAGTTCAGTCTCCACCGCTTTGGGCTGTCCTGATATTTCTATGGTCCGCAAAGGGGGACCTTCGAGGGAGCAC		
3	N R R S S Q R W R N P T G L . R Y Q A F P P G S S L V		
o	pBR322 Origin		
o			
5'	CGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAG		
o	+++++		4240
3'	GCGAGAGGACAAGGCTGGGACGGCGAATGGCCTATGGACAGGCGGAAAGAGGGAAGCCCTTCGCACCGCGAAAGAGTATC		
3	R S P V P T L P L T G Y L S A F L P S G S V A L S H S		
o	pBR322 Origin		
o			
5'	CTCACGCTGTAGGTATCTCAGTTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTTCAGCCCG		
o	+++++		4320
3'	GAGTGCACATCCATAGAGTCAAGCCACATCCAGCAAGCGAGGTTTCGACCCGACACACGTGCTTGGGGGGCAAGTCGGGC		
3	S R C R Y L S S V . V V R S K L G C V H E P P V Q P		
o	pBR322 Origin		
o			
5'	ACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACT		
o	+++++		4400
3'	TGGCGACGCGGAATAGGCCATTGATAGCAGAACTCAGGTTGGGCCATTCTGTGCTGAATAGCGGTGACCGTCGTCGGTGA		
3	D R C A L S G N Y R L E S N P V R H D L S P L A A A T		
o	pBR322 Origin		
o			
5'	GGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAG		
o	+++++		4480
3'	CCATTGTCCTAATCGTCTCGCTCCATACATCCGCCACGATGTCTCAAGAACTTACCACCGGATTGATGCCGATGTGATC		
3	G N R I S R A R Y V G G A T E F L K W W P N Y G Y T R		
o	pBR322 Origin		
o			
5'	AAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAC		
o	+++++		4560
3'	TTCCTGTCATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTTCTCAACCATCGAGAAGTAGGCCGTTTG		
3	R T V F G I C A L L K P V T F G K R V G S S . S G K		
o	pBR322 Origin		
o			
5'	AAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCT		
o	+++++		4640
3'	TTTGGTGGCGACCATCGCCACCAAAAAACAAACGTTTCGTCGTCTAATGCGCGTCTTTTTTTCCTAGAGTTCTTCTAGGA		
3	Q T T A G S G G F F V C K Q Q I T R R K K G S Q E D P		



o	Kan Cassette		
o			
5'	GGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGATTGCATCAGCCATGATGGATACTTTCTCGGCAGGA		
o	+++++		5280
3'	CCAGCTTACCCGTCCATCGGCCTAGTTTCGCATACGTCGGCGGCGTAACGTAGTCGGTACTACCTATGAAAGAGCCGTCCT		
3	V E W A G S R I K R M Q P P H C I S H D G Y F L G R		
o	Kan Cassette		
o			
5'	GCAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTC		
o	+++++		5360
3'	CGTTCCACTCTACTGTCTCTAGGACGGGGCCGTGAAGCGGGTTATCGTCGGTCAGGGAAGGGCGAAGTCACTGTTGCAG		
3	S K V R . Q E I L P R H F A Q . Q P V P S R F S D N V		
o	Kan Cassette		
o			
o	FspI		
5'	GAGCACAGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTTCAGGGCAC		
o	+++++		5440
3'	CTCGTGTGACGCGTTCTTGCGGGCAGCACCGGTCGGTGCTATCGGCGCGACGGAGCAGGACGTCAAGTAAGTCCCGTG		
3	E H S C A R N A R R G Q P R . P R C L V L Q F I Q G T		
o	Kan Cassette		
o			
5'	CGGACAGGTCGGTCTTGACAAAAAGAACCGGGCGCCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATT		
o	+++++		5520
3'	GCCTGTCCAGCCAGAACTGTTTTTCTTGGCCC CGGGGACGCGACTGTCGGCCTTGTGCCGCCGTAGTCTCGTCGGCTAA		
3	G Q V G L D K K N R A P L R . Q P E H G G I R A A D		
o	Kan Cassette		
o			
5'	GTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTC AAG		
o	+++++		5600
3'	CAGACAACACGGGTCAGTATCGGCTTATCGGAGAGGTGGGTTCGCCGGCCTCTTGGACGCACGTTAGGTAGAACAAGTTC		
3	C L L C P V I A E . P L H P S G R R T C V Q S I L F K		
o			
5'	CATGCGAAACGACCGTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCA		
o	+++++		5680
3'	GTACGCTTTGCTGGCAGTAGGACAGAGAACTAGTCTAGAACTAGGGGACGCGGTAGTCTAGGAACCGCCGTTCTTTTCGGT		
3	H A K R P S S C L L I R S . S P A P S D P W R Q E S H		
o			
5'	TCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCTTTTGAAGCTCACGCTGCCGCA		
o	+++++		5760
3'	AGGTCAAATGAAACGTCCCGAAGGGTTGGAATGGTCTCCCGCGGGGTCGACCGTTAAGAAAACCTTCGAGTGCGACGGCGT		
3	P V Y F A G L P N L T R G R P S W Q F F . S S R C R		
o			
5'	AGCACTCAGGGcgtagc		
o	+++++		5777
3'	TCGTGAGTCCCgcatgc		
3	K H S G R T		
o			