









































Identity	1	10	20	30	40	50
B26						
LPCoLN						
DE177						
N16						
B26	CTAGGTGGGG	AAAAAATAAG	GATTCTTGCT	ATCACACCTT	CTGGACTCCG	
LPCoLN	CTAGGTGGGG	AAAAAATAAG	GATTCTTGCT	ATCACACCTT	CTGGACTCCG	
DE177	CTAGGTGGGG	AAAAAATAAG	GATTCTTGCT	ATCACACCTT	CTGGACTCCG	
N16	CTAGGTGGGG	AAAAAATAAG	GATTCTTGCT	ATCACACCTT	CTGGACTCCG	
Identity	60	70	80	90	100	
B26						
LPCoLN						
DE177						
N16						
B26	ATGGGCCTCA	ATAAGATCAG	AAACAATATC	CACACTAGAA	AAGGTCTTAA	
LPCoLN	ATGGGCCTCA	ATAAGATCAG	AAACAATATC	CACACTAGAA	AAGGTCTTAA	
DE177	ATGGGCCTCA	ATAAGATCAG	AAACAATATC	CACACTAGAA	AAGGTCTTAA	
N16	ATGGGCCTCA	-TAAGATCAG	AA-----	-----CTAGAA	AAGGTCTTAA	
Identity	110	120	130	140	150	
B26						
LPCoLN						
DE177						
N16						
B26	AGATCCTCTC	TTTCATCTTC	TTCCCCA TTA	TCTTAGTAGC	CTTAGCTTTA	
LPCoLN	AGATCCTCTC	TTTCATCTTC	TTCCCCA TTA	TCTTAGTAGC	CTTAGCTTTA	
DE177	AGATCCTCTC	TTTCATCTTC	TTCC TCA TTA	TCTTAGTAGC	CTTAGCTTTA	
N16	AGATCCTCTC	TTTCATCTTC	TTCCCCA TTA	TCTTAGTAGC	CTTAGCTTTA	
Identity	160	170	180	190	200	
B26						
LPCoLN						
DE177						
N16						
B26	AGATGTTTTT	TGCACAGAAA	GTTTGAAGAT	CGTCAGATAT	TTTATACATT	
LPCoLN	AGATGTTTTT	TGCACAGAAA	GTTTGAAGAT	CGTCAGATAT	TTTATACATT	
DE177	AGATGTTTTT	TGCACAGAAA	GTTTGAAGAT	CGTCAGATAT	TTTATACATT	
N16	-----	-----	-----	-----	-----	
Identity	210	220	230	240	250	
B26						
LPCoLN						
DE177						
N16						
B26	AACTTTAGAC	AAACCCATTG	AGCAATTCA T	TGCAAAGCA T	CCTGAATTTA	
LPCoLN	AACTTTAGAC	AAACCCATTG	AGCAATTCA T	TGCAAAGCA T	CCTGAATTTA	
DE177	AACTTTAGAC	AAACCCATTG	AGCAATTCA T	TGCAAAGCA T	CCTGAATTTA	
N16	-----	-----	-----	-----	-----	
Identity	260	270	280	290	300	
B26						
LPCoLN						
DE177						
N16						
B26	TAGAAAAAAG	CTTTCCTTGAT	GCCTCTCCTG	TATTCTTTTC	ATTACCAAAA	
LPCoLN	TAGAAAAAAG	CTTTCCTTGAT	GCCTCTCCTG	TATTCTTTTC	ATTACCAAAA	
DE177	TAGAAAAAAG	CTTTCCTTGAT	GCCTCTCCTG	TATTCTTTTC	ATTACCAAAA	
N16	-----	-----	-----	-----	-----	

Identity					
B26	ACTATGCGTT	TTTTTCGATAT	CTCCATACCT	GAAGGCACTT	CTTGTGTAAA
LPCoLN	ACTATGCGTT	TTTTTCGATAT	CTCCATACCT	GAAGGCACTT	CTTGTGTAAA
DE177	ACTATGCGTT	TTTTTCGATAT	CTCCATACCT	GAAGGCACTT	CTTGTGTAAA
N16	-----GCGTT	TTTTTCGAC A T	CTC T ATACCT	GAAGGCACTT	CTTGTGTAAA
Identity					
B26	GATTACTCAA	TCCATAAAAA	CGGATAAAAT	AGTAAACTCT	ATTAAATTCCTA
LPCoLN	GATTACTCAA	TCCATAAAAA	CGGATAAAAT	AGTAAACTCT	ATTAAATTCCTA
DE177	GATTACTCAA	TCCATAAAAA	CGGATAAAAT	AGTAA A TTCCT	ATTAAATTCCTA
N16	GATTACTCAA	TCCATAAAAA	CGGATAAAAT	AGTAAA-----	-----TTCTA
Identity					
B26	TTAATATAGA	TACTCTCCCC	TGGGCCTCTT	CATGTCTTCA	CTTAGATATG
LPCoLN	TTAATATAGA	TACTCTCCCC	TGGGCCTCTT	CATGTCTTCA	CTTAGATATG
DE177	TTAATATAGA	TACTCTCCCC	TGGGCCTCTT	CATGTCTTCA	CTTAGATATG
N16	TTAATATAGA	TACTCTCC--	-----CTCTT	CATGTCTTCA	CTTAGATATG
Identity					
B26	GGGTTTACAA	G TGAGCACCA	TCGCCTTCTT	ATTGAAGACC	TAAAAAAGAA
LPCoLN	GGGTTTACAA	G TGAGCACCA	TCGCCTTCTT	ATTGAAGACC	TAAAAAAGAA
DE177	GGGTTTACAA	A TGAGCACCA	TCGCCTTCTT	ATTGAAGACC	TAAAAAAGAA
N16	GGGTTTACAA	A TGAGCACCA	TCGCCTTCTT	ATTGAAGACC	TAAAAAAGAA
Identity					
B26	AGAAATATCTT	TCACAAATTA	GTCACGAAGG	TAAGAAACGC	CTTATAAAAA
LPCoLN	AGAAATATCTT	TCACAAATTA	GTCACGAAGG	TAAGAAACGC	CTTATAAAAA
DE177	AGAAATATCTT	TCACAAATTA	GTCACGAAGG	TAAGAAACGC	CTTATAAAAA
N16	AGAAATATCTT	TCACAAATTA	GTCACGAAGG	TAAGAAA A C C	CTT T TAAAAA

Identity					
B26	TCCTGTTAGA	GTATCTTTTT	GATCTTGGCG	TAAAACAAGA	AGACCCTTTG
LPCoLN	TCCTGTTAGA	GTATCTTTTT	GATCTTGGCG	TAAAACAAGA	AGACCCTTTG
DE177	TCCTGTTAGA	GTATCTTTTT	GATCTTGGCG	TAAAACAAGA	AGACCCTTTG
N16	TCCTGTTAGA	GTATCTTTTT	GATCTTGGCG	TAAAACAAGA	AGACCCTTTG
Identity					
B26	ACCAATCCAA	ATGGTCCTAG	ACTGACGCTA	TTCCCTGAGA	CAATGAAAAA
LPCoLN	ACCAATCCAA	ATGGTCCTAG	ACTGACGCTA	TTCCCTGAGA	CAATGAAAAA
DE177	AC T AA T CC C AA	ATGGTCCTAG	ACTGACGCTA	TTCCCTGAGA	CAATGAAAAA
N16	ACCAATCCAA	ATGGTCCTAG	ACTGACGCTA	TTCCCTGAGA	CAATGAAAAA
Identity					
B26	AGGTGAGCAA	TTACAAA A GA	CATTTTGGTT	TT-CAGTCTT	TTTCAATAA
LPCoLN	AGGTGAGCAA	TTACAAA A GA	CATTTTGGTT	TT-CAGTCTT	TTTCAATAA
DE177	A A G GAGCAA	TTACAAA C GA	CATTTTGGTT	TT-CAGTCTT	TTTCAATAA
N16	T GG T A AG-AA	TTAC C AA C GA	CATTTTGGTT	TT T CAGTCTT	TTTCAATAA

