

	1	10	20	30	40	50
Identity						
B26	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
LPCoLN	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
DE177	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
AR39	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
CWL029	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
J138	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
TW183	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
TOR1	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
WA97001	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
1979	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	
SH511	CAG CCTCA CT	TTCAGCAAAG	AAAAGTCATA	CCAAGAAAAC	CA CTC CAGGT	

	60	70	80	90	100
Identity					
B26	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
LPCoLN	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
DE177	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
AR39	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
CWL029	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
J138	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
TW183	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
TOR1	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
WA97001	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
1979	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC
SH511	TCTATCCCCA	GTAAAGTCTT	CTCTAAATTC	GACGCAACCC	AAGATAAAAAC

	110	120	130	140	150
Identity					
B26	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
LPCoLN	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
DE177	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
AR39	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
CWL029	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
J138	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
TW183	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
TOR1	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
WA97001	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
1979	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA
SH511	TTTCCAAAAG	ACTTCAGGAT	CCGCATTCCC	AGCAAAAACCT	ACCACCCTGA

	160	170	180	190	200
Identity					
B26	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
LPCoLN	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
DE177	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
AR39	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
CWL029	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
J138	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
TW183	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
TOR1	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
WA97001	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
1979	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC
SH511	AAGAACTGGA	AGAGAGAAAA	AAACCTCGAC	CAGAGCGTAG	AACTACTGCC

Identity 210 220 230 240 250

B26 GATGTA AAAA GATCCC CACG CTTCTT ACCA AACAAGAAG TCGAAGAGCC
 LPCoLN GATGTA AAAA GATCCC CACG CTTCTT ACCA AACAAGAAG TCGAAGAGCC
 DE177 GATGTA AAAA GATCCC CACG CTTCTT ACCA AACAAGAAG TCGAAGAGCC
 AR39 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 CWL029 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 J138 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 TW183 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 TOR1 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 WA97001 GATGTA AAAA GATCCC CACG CTTCTT ACCA ACACAAGAAG TCGAAGAGCC
 1979 GATGTA AAAA GATCCC CACG CTTCTT ACCA AACAAGAAG TCGAAGAGCC
 SH511 GATGTA AAAA GATCCC CACG CTTCTT ACCA AACAAGAAG TCGAAGAGCC

Identity 260 270 280 290 300

B26 TGTACCTGCC GCCTCTAAAG AAATAATTAGA TAGTATACAG GTTTGGGAAG
 LPCoLN TGTACCTGCC GCCTCTAAAG AAATAATTAGA TAGTATACAG GTTTGGGAAG
 DE177 TGTACCTGCC GCCTCTAAAG AAATAATTAGA TAGTATACAG GTTTGGGAAG
 AR39 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 CWL029 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 J138 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 TW183 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 TOR1 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 WA97001 TGTACCTGCC GCCTCTAAAG AACAAATTAGA TAGTATACAG GTTTGGGAAG
 1979 TGTACCTGCC GCCTCTAAAG AAATAATTAGA TAGTATACAG GTTTGGGAAG
 SH511 TGTACCTGCC GCCTCTAAAG AAATAATTAGA TAGTATACAG GTTTGGGAAG

Identity 310 320 330 340 350

B26 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 LPCoLN AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 DE177 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 AR39 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 CWL029 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 J138 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 TW183 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 TOR1 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 WA97001 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 1979 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA
 SH511 AAAAACAAAA TTAGCTCGC AGAGCCGTAA ATGCTATCAA TCTGAGTATA

Identity	360	370	380	390	400
B26	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
LPCoLN	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
DE177	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
AR39	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
CWL029	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
J138	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
TW183	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
TOR1	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
WA97001	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
1979	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA
SH511	AAAAAA CAAC	TCGAAGAGCA	AACCTCCACA	GTTACAGAGA	AAGACGTCCA

Identity	410	420	430	440	450
B26	ACCTAAAA CA	CAAGCAACAC C	CACACGCTGC	GAAGAAAAAC	GTTGCAAGTC
LPCoLN	ACCTAAAA CA	CAAGCAACAC C	CACACGCTGC	GAAGAAAAAC	GTTGCAAGTC
DE177	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
AR39	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
CWL029	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
J138	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
TW183	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
TOR1	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
WA97001	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
1979	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC
SH511	ACCTAAAA CA	CAAGCAACAC C	CACACGCTTTC	GAAGAAAAAC	GTTGCAAGTC

Identity	460	470	480	482
B26	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
LPCoLN	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
DE177	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
AR39	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
CWL029	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
J138	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
TW183	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
TOR1	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
WA97001	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
1979	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA
SH511	CTTCGACC TC	TATGCCAGGA	ATCGAGAAAG	CA

