

Identity 1 10 20 30 40 50

B26 TTTGACTGAA GATCAAAAAA AAACGGCACT TACTGTTGG A GGAAAAGTAA

B37 TTTGACTGAA GATCAAAAAA AAACGGCACT TACTGTTGG A GGAAAAGTAA

LPCoLN TTTGACTGAA GATCAAAAAA AAACGGCACT TACTGTTGG A GGAAAAGTAA

DE177 TTTGACTGAA GATCAAAAAA AA - CGGCATT TACTGTTGGG GGAAAAGTAA

N16 TTTGACTGAA GATCAAAAAA AAACGGCATT TACTGTT A G A GGAAAAGTAA

AR39 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

CWL029 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

J138 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

TW183 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

TOR1 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

WA97001 TTTGACTGAA GATCAAAAAA AAACG A CATT TACTGTTGGG GGAAAAGTAA

1979 TTTGACTGAA GATCAAAAAA AAACGGCATT TACTGTTGGG GGAAAAGTAA

SH511 TTTGACTGAA GATCAAAAAA AAACGGCATT TACTGTTGGG GGAAAAGTAA

Identity 60 70 80 90 100

B26 CTACAGAAA TACTGTAGTT G GAGGAGATC TCACCTGTAC AGACGG A GGA

B37 CTACAGAAA TACTGTAGTT G GAGGAGATC TCACCTGTAC AGACGG A GGA

LPCoLN CTACAGAAA TACTGTAGTT G GAGGAGATC TCACCTGTAC AGACGG A GGA

DE177 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

N16 CTACAGAAA TACTGTAGTT G GAGGAGATC TCACCTGTAC AGACGG A GGA

AR39 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

CWL029 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

J138 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

TW183 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

TOR1 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

WA97001 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

1979 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

SH511 CTACAGAAA TACTGTAGTT AGAGGAGATC TCACCTGTAC AGACGG CGGA

Identity 110 120 130 140 150

B26 CT C A C G T G T C A A T C G G A T C T T A C A A T A C A A A A A G A T A T A A A T A T C A G A C C

B37 CT C A C G T G T C A A T C G G A T C T T A C A A T A C A A A A A G A T A T A A A T A T C A G A C C

LPCoLN CT C A C G T G T C A A T C G G A T C T T A C A A T A C A A A A A G A T A T A A A T A T C A G A C C

DE177 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

N16 CT C A C G T G T C A A T C G G A T C T T A C A A T A C A A A A A G A T A T A A A T A T C A G A C C

AR39 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

CWL029 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

J138 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

TW183 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

TOR1 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

WA97001 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

1979 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

SH511 CTGACTTGTC AATCGGATCT TACAA TACA A A A G A T A T A A A T A T C A G A C C

Identity	160	170	180	190	200
B26	TACAAGCAC T	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA C T
B37	TACAAGCAC T	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA C T
LPCoLN	TACAAGCAC T	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA C T
DE177	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
N16	TACAAGCAC T	AA TGA CA TAG	TTTTTTG G TGG	TCG A TTAAAT	TTATCTAA C T
AR39	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
CWL029	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
J138	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
TW183	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
TOR1	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
WA97001	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
1979	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T
SH511	TACAAGCAC C	AATAGCATGG	TTTTTTGATGG	TCGCTTAAAT	TTATCTAA T T

Identity	210	220	230	240	250
B26	CACCTTTGTC	TTATAAG G AAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
B37	CACCTTTGTC	TTATAAG G AAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
LPCoLN	CACCTTTGTC	TTATAAG G AAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
DE177	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
N16	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
AR39	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
CWL029	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
J138	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
TW183	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
TOR1	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
WA97001	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
1979	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA
SH511	CACCTTTGTC	TTATAAAAAAT	TCTCAAGGAC	AAGACATTAC	CGACTATGAA

Identity	260	270	280	290	300
B26	AAAA T AGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
B37	AAAA T AGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
LPCoLN	AAAA T AGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
DE177	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
N16	AAAA T GAG T	CAGGGAAACC	TCAAGAAATAT	G TTCCTTT T G	G A TATTATAA
AR39	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
CWL029	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
J138	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
TW183	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
TOR1	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
WA97001	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
1979	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA
SH511	AAAA T GAGCT	CAGGGAAACC	TCAAGAAATAT	G TTCCTTTTCG	GGTATTATAA

Identity	610	620	630	640	650
B26	AGGGA A GATA	AA A GTCACAG	AG C TTGC G AT	GACGAG G CTCT	AGAGG AA C A
B37	AGGGA A GATA	AA A GTCACAG	AG C TTGC G AT	GACGAG G CTCT	AGAGG AA C A
LPCoLN	AGGGA A GATA	AA A GTCACAG	AG C TTGC G AT	GACGAG G CTCT	AGAGG AA C A
DE177	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
N16	AG T GA A GATA	AA A GTCACAG	AG C TTGC G AT	GACGAG G CTCT	AGAGG AA C A
AR39	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
CWL029	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
J138	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
TW183	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
TOR1	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
WA97001	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
1979	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA
SH511	AGGGAGGATA	AA TGTCACAG	ATCTTGCAAT	GACGACCTCT	AGAGGGTCCA

Identity	660	670	680	690	700
B26	GTTATTA TGA	AA CACG A CCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
B37	GTTATTA TGA	AA CACG A CCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
LPCoLN	GTTATTA TGA	AA CACG A CCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
DE177	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
N16	GTTATTA TGA	A G CACG A CCT	TTACAGGTAG	TTTGC GTT G T	G TA T TATGCT
AR39	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
CWL029	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
J138	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
TW183	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
TOR1	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
WA97001	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
1979	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT
SH511	GTTATTA TGA	AA CACG TCCT	TTACAGGTAG	TTTGC GTTAC	ATACTATGCT

Identity	710	720	723
B26	A AAAA TAA TG	GTTACTTTAC	TTT
B37	A AAAA TAA TG	GTTACTTTAC	TTT
LPCoLN	A AAAA TAA TG	GTTACTTTAC	TTT
DE177	CAAAA TAA TG	GTTACTTTAC	TTT
N16	A AAAA TAA TG	GTTACTTTAC	TTT
AR39	CAAAA TAA TG	GTTACTTTAC	TTT
CWL029	CAAAA TAA TG	GTTACTTTAC	TTT
J138	CAAAA TAA TG	GTTACTTTAC	TTT
TW183	CAAAA TAA TG	GTTACTTTAC	TTT
TOR1	CAAAA TAA TG	GTTACTTTAC	TTT
WA97001	CAAAA TAA TG	GTTACTTTAC	TTT
1979	CAAAA TAA TG	GTTACTTTAC	TTT
SH511	CAAAA TAA TG	GTTACTTTAC	TTT

