

```
1
twiana -----
twiere ----- AATATAAAAA AATCTCACAC TTAAGTATAG TTCTGCATTA ATTAACGACC AATGATATAT
twigri ----- TAGAAAT
twimel -----
twimoj --- AGTTGCG ATCGTAGCAA AGACAACAAC CAAGCGCAAG CTCCTATGGG TTTTATATAGG CATCCCCCTTC
twiper ----- TGAAG CTTCATCTTT GTTTACATAC AATGTTCT-T
twipse ----- TGAAG CTTCATCTTT GTTTACATAC AATGTTCT-T
twisec -----
twisim -----
twivir ----- AAGCT TAAATCGTTT GTGAGCTCAT ATTAACGAAA ACTAATCTTA
twiwil ----- ACAAAA TAAATGTTTT CTTTTTTAAC TTAGAACATT TTTTCTCTCT
twiyak TACTCCTTTA AATATAAAAA AATCTTACAC TAAACTATA TTTTGCTTTT ATGAACGACC ATTAATATAT
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71
twiana -----
twiere TCTTTATATT A-----GTCTG TCTTTTACGA GTAAAACAA CAA-----TTGAAATT TC-----
twigri AAATTAAATT AACAATCAAT TAACATGGT-----TAA-----TAATAAAT GTGCTAAGTG
twimel AGCTTATATT A-----CTTTG TGTTTTATA-----ACAA-----TAA-----TAATAAAT GTGCTGAGGG
twimoj AGCTCACATT CAGTGCCAAAT GGCAATGCTG AGAAAACTAA TGC AAAATGA ATTTATAGTT AATTGAAATA
twiper TCCTCACATT-----TT TGATGATCA TATAAACAA TAA-----CTATATAC TC-----
twipse TCCTCACATT-----TT TGATGATCA TATAAACAA TAA-----CTATATAC TC-----
twisec AGCTTATATT A-----CTTTG TGTTTTATT-----ACAA-----TAA-----TAATAAAT GTGCTGAGGG
twisim AGCTTATATT A-----CTTTG TGTTTTATT-----ACAA-----TAA-----TTGTAAAT GCGCTGAGGG
twivir AGCGTTTGT AATTAAATAT TAGTTTATA-----A-----CAAACCTGA TTTAATTAGT GT-----
twiwil TAATCACACT TGTCCCATTT CCATTGACC-----A-----TAAATCTT TTGAATTATT ATTTAG-----
twiyak AGATTACATT A-----GTCTG TGTTTTATA-----ACAATAA TAA-----TAATAAAT GTGCGAAGGG
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141
twiana -----
twiere CAGTAA--AT CATATTGCTC AT-----C ATAT-----CAT AGCTCCTAGG ACCAGGTAGG TAAGA-----
twigri CAGTAA--AT ATTATTATTG GT-----C ATATACGTT GGAGTTGCCG GCCAGGTAAG CAAAC-----CCG
twimel CAGTAA--AT CATATTGCTC AT-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TTTGG-----
twimoj TTGTAAATAT AAAATGGTTC ATCGAAATGC ATGTTTATA GGTTTCACTC ACCAATCAGG TAAAG--ATT
twiper --TATTAAT AATATAATAA AC-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twipse --TATTAAT AATATAATAA AC-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twisec CAGTAA--AT CATATTGCTC AT-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twisim CAGTAA--AT CATATTGCTC AT-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twivir --TATTAAT AATATAATAA AC-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twiwil --TATTAAT AATATAATAA AC-----C ATGT-----CCA AGCTCCTAAG TCCAGGTAGT TGTGG-----
twiyak CAGTAA--AT CATATTGCTC AT-----C ATAT-----CCA AGCTCCTGAG ACCAGGTAGT TTTGG--
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211
twiana GACC-----GG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG-----ACC
twiere -CAC-----AG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG GGT--CCATT
twigri AGCT-----GA-----G-----AA AAAACCCCT--GTTGGTGGT TTTTCTGAG GA--CCTTC
twimel -GAC-----AG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG GGA--CCATT
twimoj GCCCGGCGACG GAGTATAAAG TGAAGACAAA AAAACCCC--TATCGTGGT TTTTCT--CTG
twiper -----G-----GC AAAACCCCT--GCTGGCGGT TTTTCTACAA GGATGCTGCT
twipse -----G-----GC AAAACCCCT--GCTGGCGGT TTTTCTACAA GGATGCTGCT
twisec -GTC-----AG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG GGA--CCATT
twisim -GAC-----AG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG GGA--CCGTT
twivir ACCC-----AG-----G-----GC AAAACCCCT--CCTCGTGGT TTTTCTGCTC GG--CCCT
twiwil AGCCCGGCTT TAG-----G-----GC AAAACCCCTTG AGAGAGCGGT TTTTCTCATA GG--
twiyak -TAC-----AG-----G-----GC AAAACCCCT--GTTGGTGGT TTTTCTAAGG GGT--CCATT
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281
twiana AATCGTCCTG GGATATTTGG CTATTACCTA ATCCGGT-----AATATCGGAG ATC-----
twiere TCGTCTCCTG GG--TTTGG CTATTACCTA AGCCGAC-----GATCG GCGATCGGAG ATCTTCGATC
twigri GCTCGCTTTT GG-----GTTAGGTA AGCGCGT-----CAG-GACAC GAATCCG-----
twimel TCGAGTCCTG GG--TTTTG CTATTACCTA AGCCGGG-GA TCGGCGATCT GCGATCGGAG ATCTTCGATC
twimoj CCTCGTTCGC GG-----GTTAGGTA AGTCCCTT-AAAGGACGC GATTCGGGCG TACCTCTACT
twiper TTTTCGTCTG GG--GTTTG--GTTACCTA AGCCGGG-----TCGGCGAAT GCGATCGGAG ATCTTCGATC
twipse TTTTCGTCTG GG--GTTTG--GTTACCTA AGCCGGG-----TCGGCGAAT GCGATCGGAG ATCTTCGATC
twisec TCGAGACCTG GG--TTTTG CTATTACCTA AGCCGGGCTGA TCGGCGAAT GCGATCGGAG ATCTTCGATC
twisim TCGAGTCTG GG--TTTTG CTATTACCTA AGCCGGGCTGA TCGGCGAAT GCGATCGGAG ATCTTCGATC
twivir ACTCGGCTCG GG-----TTAGGTA AGTCCAA-----AGGACGT GAATCCGGCG TCCTTTTTCG
twiwil TCGCGACTTA GG-----TA AGCCGAA-----GGACGTGG ACCTTTTAT-
twiyak TCGTGTCTG GG--TTTGG CTATTACCTA AGCCGGC-----GATCG GCGACCGGAG ATCTTCGATC
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351

twiana	GCGGTTTTTT	CCAGCGGAAG	TTC--GC-GC	TCCG-CATTA	AT-----	---CGGGTAT	TTTTGTTAG-
twiere	GTGGTTTTTT	CCAGCGGAAG	TTC--GC-GA	TCTG-CATTA	AT-----	---CGGGTAT	TTTTGGTGG-
twigri	GCCGTATTTT	CCAGCGGAAG	TTC--GC-GT	CGCG-CATTA	AT-----	---CGGGTAT	TTTTGCTCC-
twimel	GTGGTTTTTT	CCAGCGGAAG	TTC--GC-GC	TCTG-CATTA	AT-----	---CGGGTAT	TTTTGGTGG-
twimoj	CTCGTATTTT	CCAAACGAAG	TTA--GT-TC	GACG-CATTA	AT-----	---CGGGTAT	TTTCGGTTT-
twiper	ATCGTCTTTT	CCAGCGGAAG	TTCTGTC-GC	TCCG-TATTA	AT-----	---CGGGTAT	TTTTGTTGAT
twipse	ATCGTCTTTT	CCAGCGGAAG	TTCTGTC-GC	TCCG-TATTA	AT-----	---CGGGTAT	TTTTGTTGAT
twisec	GTGGTTTTTT	CCAGCGGAAG	TTC--GC-GC	TCTG-CATTA	ATACAAAAAT	ACCCG--AT	TTTTGCTGG-
twisim	GTGGTTTTTT	CCAGCGGAAG	TTC--GC-GC	TCTG-CATTA	AT-----	---CGGGTAT	TTTTGCTGG-
twivir	GCGGTCTTTT	CCAGCGGAAG	TTC--GC-GC	GCCG-CATTA	AT-----	---CGGGTAT	TTTTGCTCT-
twiwil	GCGGTCTTTT	CCAGCGGAAG	TTT--GCAGC	GCCGATATTA	AT-----	---CGGGTAT	TTTTACTTT-
twiyak	GTGGTTTTTT	CCAGCGGAAG	TTC--GC-GA	TCTG-CATTA	AT-----	---CGGGTAT	TTTTGCTGG-

421

twiana	-----	GCCGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twiere	-----	-CCGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twigri	-----	-GCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twimel	-----	-CCCCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twimoj	-----	-TCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twiper	CGCCGCGGCC	GCTGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twipse	CGCCGCGGCC	GCTGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twisec	-----	-CCGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twisim	-----	-CCGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twivir	-----	-CAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT
twiwil	-----	ACCCCGACAG	GCAGGCAGAT	AAATTTGCAT	ATATATTTAA	GTATATCCGG	AAATTTGACT
twiyak	-----	-CCGCGGCAG	GCAGGCAGAT	AAT-----	-----	-TATATCCGG	AAATTTGACT

491

twiana	TT-TCGCTCG	TATTTTCTG	GATTTT	---GGATTTT	GGTGC GGAGA	TTTTCC	-----
twiere	TT-TCGCTCG	TATTTTCTG	GATTTT	---CGGAGCTC	CGAGCGGAT	TC	-----
twigri	TTCTCGCTCG	TATTTTCTG	GATTTTCTG	TGTGTTTTTC	TAGTTGAGAT	TTATGACTGT	CTAGTC
twimel	TT-TCGCTCG	TATTTTCTG	GATTTT	---CGGAGCTC	CGAGCCGCAT	TC	-----
twimoj	T-TCGCTCG	TATTTTCTG	GGTTTT	TCTGTTTTTC	TAGACGAGAT	CCTATATAG	-----
twiper	TT-TCGCTCG	TACTCGTCT	-ATTTT	-CGATTTTC	AGTGC	-----	-----
twipse	TT-TCGCTCG	TACTCGTCT	-ATTTT	-CGATTTTC	AGTGC	-----	-----
twisec	TT-TCGCTCG	TATTTTCTG	GATTTT	---CGGAGCTC	GGAGCGGCAT	TC	-----
twisim	TT-TCGCTCG	TATTTTCTG	GATTTT	---CGGAGCTC	CGAGCGGCAT	TC	-----
twivir	TC-TCGCTCG	TATTTTCTG	GATTTT	TGTGTTTTTC	TAGATGAGGT	TTATGG	-----
twiwil	TC-TCGCTCG	TATTTTCTG	GATTTT	TGTGTTTTTC	TAGATGAGGT	TTTTCGCTTC	CCTTTAGATG
twiyak	TT-TCGCTCG	TATTTTCTG	GATTTT	---CGGAGCTC	CGAACGGCAT	TC	-----

561

twiana	---CACTGCA	TGCGTGAT	TGTG	---CGTCAGCG	TGTGTGCTG	TGCG	GG	AATTCACTAA
twiere	---GCCCCA	-----	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twigri	---GCATGG	TGTGTGTGA	TGTGTGTGCG	CGAGTGTGTC	TGTGTGTGTG	TGTG	GG	AATTTACTAA
twimel	---GCGTGCG	A-----	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twimoj	---ATGTACC	TATATAAATA	CATGTAAAGCG	TGTGTGTGTG	TGTGTGTGTG	TGTG	GG	AATTTACTAA
twiper	---CCTGCG	ATGTGTGTG	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twipse	---CCTGCG	ATGTGTGTG	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twisec	---GCCTGAT	A-----	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twisim	---GCCTGCG	A-----	CTCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA
twivir	---GATTGGG	ATTGTGTCTT	TGTG	-----	TGTGTGTGTG	TGTG	GG	AATTTACTAA
twiwil	TGTGTGCGTG	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGCG	CGG	AATTTACTAA
twiyak	---GCCTGCG	C-----	CCCG	-----	GTACGTGTG	TGTG	GG	AATTCACTAA

631

twiana	TT-----	AGG	CATAATGAA	CCTTTCGGCG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGA	---
twiere	TT-----	AGG	CATAATGAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGT	---
twigri	TTACATGAAA	-----	CCATAATGAAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGA	---
twimel	TT-----	AGG	CATAATGAAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGT	---
twimoj	TT-----	ACG	CATAATGAAA	ACTTTCTATG	GAGTTTCCTC	-----	CC	TTC	GTTA	GGGTTGA	---
twiper	TT-----	AGG	CATAATG-AA	CCTTTCGGTG	GGGTTCC	-----	CC	TTC	GTTA	GGGTTGA	---
twipse	TT-----	AGG	CATAATG-AA	CCTTTCGGTG	GGGTTCC	-----	CC	TTC	GTTA	GGGTTGA	---
twisec	TT-----	AGG	CATAATGAAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGT	---
twisim	TT-----	AGG	CATAATGAAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGT	---
twivir	TT-----	ACG	CATAATGAAA	CCTTTTCGTG	GAGTTTCCTT	-----	CC	TTC	GTTA	GGGTTGT	---
twiwil	TT-----	ATG	CATAATGAAA	CCTTTTCGTG	GAGTTCCCAG	-----	CC	TTC	GTTA	GGGTTGT	---
twiyak	TT-----	AGG	CATAATGAAA	CCTTTTCGTG	GAGTTCC	-----	CC	TTC	GTTA	GGGTTGT	---

701

twiana	---	GGATTT	-AGCGCT	-TT	ACGATGGTTG	GA	---	AAC	---	GAT	GATTATATAA	TAGCGGA	-AT
twiere	---	GGATTT	GCATACT	-TT	ACGATGGTTG	GC	---	AACG	---	GAT	GATTATATAA	GAGCGGA	-AT
twigri	---	GGACTT	-AAGTT	-CC	ACGAC	-TCG	ACAACTAAAT	CGAAAATAAAT	---	---	TATTAGATAA	TCGACTGGAT	---
twimel	---	GGATTT	GCACGCT	-TT	ACGATGGTTG	GCAACTAACT	---	---	GAT	GATTATTTAA	TAGCGGA	-AT	
twimoj	---	AGACTA	-ATGCT	---	ACGTATTTTA	GTACAAAAGT	---	---	AAT	GATTATA-AA	TGACTTAGTT	---	---
twiper	ACGGGAACGA	GGAAAGCT	-TT	ACGATGATCT	TCA	---	ACCT	---	---	GAT	GGTTATATAA	TAGGTGG	-GT
twipse	ACGAGAACGA	GGAAAGCT	-TT	ACGATGATCT	TCA	---	ACCT	---	---	GAT	GGTTATATAA	TAGGTGG	-GT
twisec	---	GGATTT	GCACGCT	-TT	ACGATGGTTG	GCAACTAACT	---	---	GAT	GATTATATAA	TAGCGGA	-AT	
twisim	---	GGATTT	GCACGCT	-TT	ACGATGGTTG	GCAACTAACT	---	---	GAT	GATTATATAA	TAGCGGA	-AT	
twivir	---	GGATTT	TAAATTTGGC	---	ACGATGATT	ATA	---	AATG	CAAAGAAAAT	AATTTGATAA	T	---	---
twiwil	---	GGATTT	CTA-GTT	-TT	ATGATC-TCA	A	---	---	---	GAT	TATTATATAA	TCGCAA	-AT
twiyak	---	GGATTT	GCATGCT	-TT	ACGATGGTTG	GC	---	AAC	---	GAT	GATTATATAA	GAGCGGA	-AT

771

twiana	G	---	ATTTT	GATGGGCATA	AACGAACAAA	---	---	CATTAAA	CTGGGTATCC	T	---	GGGGA	---
twiere	G	---	ATTTT	GATGGGC	A	AGCGTCTAAA	---	---	CATTTTCG	GCTTGTTTCC	T	---	GGGAA
twigri	A	---	AACTTA	GATTAAC	---	AA	---	---	GAATGTG	GCTAAAAAGC	T	---	AAAAG
twimel	G	---	ATTTT	GATGGGC	-G	AGCGTCTAAA	---	---	CATTTTCG	GCTTGTTTCC	T	---	GGGAA
twimoj	AT	---	AAATTA	GATTTAC	---	---	---	---	---	---	---	---	ACAAT
twiper	GGGAATTTT	---	---	GTCAATC	---	AGGGTTCAGT	---	GTTTTGT	CTCGATCTTA	GCTTGGATAT	CTGCAAAAAGG	---	---
twipse	GGGAATTTT	---	---	GTCAATC	---	AGGGTTCAGT	---	GTTTTGT	CTCGATCTTA	GCTTGGATCT	GCAAAAAGGAA	---	---
twisec	G	---	ATTTT	GATGGGC	-A	AGCGTCTAAA	---	---	CATTTTCG	GCTTGTTTCC	T	---	GGGAA
twisim	G	---	ATTTT	GATGGGC	-A	AGCGTCTAAA	---	---	CATTTTCG	GCTTGTTTCC	T	---	GGGAA
twivir	---	---	TTTTT	GGTCAAT	---	---	---	---	---	---	---	---	ATAAA
twiwil	G	---	ATTTT	AATGGGCATA	AACGACAAAC	AAGAAGT	GAG	AGTGAAACCA	TTTCAAATCC	T	---	GGGAA	---
twiyak	G	---	ATTTT	TATGGGC	-A	AGCGTCTAAA	---	---	CATTTTCG	GCTTGTTTCC	T	---	GGGAA

841

twiana	ATTCCACTAC	CAATTACTAA	GCTGTCTTGG	AAACTGGCCA	GTTTTCCCAG	CCAGGAAAAT	CAAATTAGTC	---
twiere	ATTCCAG	CCACTCCAAA	G	---	ATATCT	AGAAACTGAA	ATTCCCCCGC	ACAGAAAAGT
twigri	ATCCATAGCT	AAATCCACCA	A	---	AAATAT	CGAAACTATA	ACC	---
twimel	ATTCCCTG	CGATCCCAAA	G	---	TATAT	ACAAATGGAA	AAT	---
twimoj	ATTTT	GAAATGTGAA	G	---	TATAT	AAATAATAAA	GTATTTT	---
twiper	AATCA	CAGCTTCTGA	GGACTTTTTT	---	---	---	---	---
twipse	TCA	CAGCTTCTGA	GAACTTTTTT	---	---	---	---	---
twisec	ATTCCCTG	AAATTTCCAAA	A	---	CATAT	AGATAAGGAA	AAT	---
twisim	ATTCCCTG	CGATCCCAAA	A	---	CATAT	AGAAATGGAA	AAT	---
twivir	CTTAATA	TAAATTAATAA	CAACACATTT	TGTAAATCAA	TTT	TTTTGAATT	TAATTTAATA	---
twiwil	AATTTTCA	CAATTTCCCAA	A	---	TTTCACT	CAAAATGAAA	ATTGACTATC	GTTCCAAAGT
twiyak	ACTCCCTG	CAACCCCAAA	G	---	TATCT	AAAAACGGAA	ATTCCTCGC	ACAGAACATT

911

twiana	A	---	---	---	---	A	ATTACTAT	---	TAATAACTC	---
twiere	A	---	---	---	---	A	TATGCAATCA	GATAACTTGC	ACTAAAACTT	---
twigri	A	---	---	---	---	A	CTTAATTTAA	GTAAAA	TCATAATT	---
twimel	A	---	---	---	---	A	TATGCAATCA	GATAGA	TATAAATT	---
twimoj	A	---	---	---	---	A	TTTATCTTT	---	TAATAAAT	---
twiper	A	---	---	---	---	A	ACCCAAATAA	TGTGCTCTC	TTCCAATGA	---
twipse	A	---	---	---	---	A	ACCCAAATAA	TGTGCTCTC	TTCCAATGA	---
twisec	A	---	---	---	---	A	TATGCAATCA	GATAGA	TATAACAT	---
twisim	A	---	---	---	---	A	TATGCAATCA	GATAGA	TATAACTT	---
twivir	A	---	---	---	---	A	TTTTTAAGGA	TTT	TATAGCTT	---
twiwil	ATACAGATTT	TACGCTGACG	TCAATGTGAA	AATGACTTCA	TCTGTGACCA	ATGAATTT	---	---	TTCTATTT	---
twiyak	A	---	---	---	---	A	TATGCAATCA	GA	TAATAACTT	---

981

twiana	AGA	---	---	CTAAT	TCAAA	TGGA	---	---	---	---
twiere	ATATTGGGT	TGTACATATT	TACATCTAAA	TGAATTTTAT	GACCGATTTA	T	---	GTATA	TTCCGGCTGCT	---
twigri	AAATTACCGT	---	AT	TAAAGATGAC	TAAAGTTGGT	CTTTAAA	---	C	ATATA	CTTCTC
twimel	ATAATCGATT	TATATATACT	TACATCTAAA	TGAATTTGAT	ACCGGATTTA	T	---	GTTGA	TTTTCTGTGT	---
twimoj	ACTTTAAAGT	---	---	---	---	---	---	---	---	---
twiper	AGATTACAGCC	GGTACTTAA	---	---	---	---	---	---	---	---
twipse	AGATTACAGCC	GGTACTTAA	---	---	---	---	---	---	---	---
twisec	ATAATCGATT	TATGCATAAA	TAAATTTGGG	AGAAATTCAT	---	---	---	---	---	---
twisim	ATTATCGATT	TATGCATAAA	TAAATTTTCAT	---	---	---	---	---	---	---
twivir	AAGTTAAAGC	TTAAGTTAAA	ATCAGCATAC	CTAAATATAT	TTTTAAA	---	---	ATATA	TATATTAAAT	---
twiwil	TCTTTTCAAT	TCCAAAAAG	TGC	---	AA	TAAAAATTTAT	TTTTCAATCGC	TTAGATTGAA	ATATTTTGT	---
twiyak	ATAATCAATT	TGTACAACCT	TACATCTAAA	TGAA	TTTTAC	ACCCGACCTT	T	---	TTTGA	TTTTGTGAGAA

1401

twiana	-----T	GAACTTCCCC	TTCTTC	CA	CAC				
twiere	-GCTGAGAAC	ACTTTTTTAA	GACCTC	GA	AACCTCG-TC	ATTATAATAC	ACATATCTAA	-----	-----
twigri	-----	-----TTTTTCCC	AGTTTC	TG	CGCTATTTTT	TATTTGTTTT			
twimel	-TCTGAATGC	ACTTTTTTCAA	AACTTA	GA	AACTCTGTCC	TA			
twimoj	ATATGTATAT	CATCCTTGAA	TAATACTATA		ACAAATAATC	AA			
twiper	-----	-----	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----	-----	-----
twisec	-TCTGAATGC	ACTTTTTTCAA	AACTTA	GA	AACTCTGTTC	TA			
twisim	-TCTGAATGC	ACTTTTTTCAA	AACTTA	GA	AACTCTGATC	CTA			
twivir	-----ATATCT	AAATTTCTCC	TACTCG	CT	TATTCG				
twiwil	-AGTGATCAT	TAATTTGTAA	AGTTTCTTCT		CACCTGAAGTT	TATCTCATAT	ATATTGATCT	TTAGTTGGAG	
twiyak	-TCTG	-----	T	CA	AACCTCG-TC	ATTTTAGTAT	ACTAATATCT	ATATATGTAT	

1471

twiana	-----		TGA	-----	-----	-----	AGTC	TAGTGTAGTC	
twiere	-----		TAA	-----	-----	-----	ATTG	CTGTCTGATCC	
twigri	-----		TAA	-----	-----	-----	CTTC	TTGGCCATTTT	
twimel	-----		TGA	-----	-----	-----	ATTC	CCGTCTGATCC	
twimoj	-----		TAA	-----	-----	-----	TATATTTT	AAATATAATA	
twiper	-----		TAG	-----	-----	-----	AGTA	ACACCAA	
twipse	-----		TAG	-----	-----	-----	AGTA	ACACCAA	
twisec	-----		TGA	-----	-----	-----	ATTC	CCGCCGATCC	
twisim	-----		TGA	-----	-----	-----	ATTC	CCGCCGATCC	
twivir	-----		TCG	-----	-----	-----	ATCC	TAAACCAACT	
twiwil	TTAATTGGGG	TTTTCTTCA	AAGGCTTCGA	TTATCTTCGA	TTTATATTTA	ATGCAATATTA	AAAACCAATT		
twiyak	ATATGTATCT	TATCTTATAA	-----	-----	-----	-----	TTTG	CCGTCTGATCC	

1541

twiana	T	TTTGTTT	-----	-----	CC	TTTAC	-----	GGAATCA	ACA
twiere	G	AAGATCT	TCTCAATCC	-----	CC	TTTTT	-----	G AATCA	ACA
twigri	CTTACACATT	TCCCAGTTG	-----	-----	CT	TTTTATTTTAC	AAAGAAATCG	CAA	
twimel	A	AAGATAT	TCTCAATCC	-----	CC	TTTTT	-----	G AATCA	ACA
twimoj	TTACTACTTT	TCCCA	-----	-----	TT	TACTGCATAC	GAGG	AATTC	GCA
twiper	-----	-----	-----	-----	CA	TTTGATT	-----	GATGA	AAG
twipse	-----	-----	-----	-----	CA	TTTGATT	-----	GATGA	AAG
twisec	A	AAGATAT	TCTCAATCC	-----	CC	TTTTT	-----	G AATCA	ACA
twisim	A	AAGATAT	TCTCAATCC	-----	CC	TTTTT	-----	G AATCA	ACA
twivir	TTTTACGGTT	TCCCAGTTG	-----	-----	CT	TTATGTTTAC	GTAG	AATTC	TCA
twiwil	ATCCAACTTT	GCTCAGTCC	AAAACTAATA	AATAATAGTC	TTTTT	-----	AAAATCG	ACATTAACCT	
twiyak	A	AAGATAT	TCTCAATCC	-----	CC	TTTTT	-----	G AATCA	ACA

1611

twiana	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	G
twiere	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	A
twigri	-----	-----	AAAATAAA	-----	CC	AAA	ACCAA	-----	A
twimel	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	A
twimoj	-----	-----	AAAAAAAA	TTAACCAGG	TTCTCAAAAA	-----	TCCAA	-----	T
twiper	-----	-----	GGGTAGAC	-----	C	AG	TGCTA	-----	T
twipse	-----	-----	GGGTAGAC	-----	C	AA	TGCGA	-----	T
twisec	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	A
twisim	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	A
twivir	-----	-----	GATGAAAA	-----	A	AA	AATAA	-----	CCCA
twiwil	TTTCCATGAT	TTGTTTAGAA	ATAGCTAAAA	GTCAAAATAA	TTTCC	AAA	GACAAATGAG	TTGGGTTATT	
twiyak	-----	-----	AGTAAAAA	-----	T	AT	TTCAA	-----	A

1681

twiana	A-ATTGCCGG	-----	CA	ATTCTTCTC	GCCTCGCC	-----	-----	-----	-----
twiere	A-ATTGCCGA	-----	TA	ATTCCCCTC	GTCTTCCC	-----	CGTCC	-----	-----
twigri	AAAAA AAAAG	-----	AA	ATAACCCAA	GTCTCTCT	-----	CTCCC	-----	-----
twimel	A-ATTGCCGA	-----	CA	ATTCCCCTC	GTATTCCC	-----	CGTC	-----	-----
twimoj	GTGCTCTCCA	-----	TCA	CTCGTACTCT	GCCTCGCT	-----	-----	-----	-----
twiper	ATATGGTCTGA	-----	TA	AATGAT	GTATTC	-----	-----	-----	-----
twipse	ATATGGTCTGA	-----	TA	AATGAT	GTATTC	-----	-----	-----	-----
twisec	A-ATTGCCGA	-----	CA	ATTCTCTCTC	GTATTCCTC	-----	CGTC	-----	-----
twisim	A-ATTGCCGA	-----	CA	ATTCCCCTC	GTATTCCTC	-----	CATC	-----	-----
twivir	A-GTCTCAAA	-----	AA	ATCCAGAACT	GTCTCTCT	-----	CT	-----	-----
twiwil	AAATTATTAA	ATAAAATATTA	AGTTCTTTGT	GTATCACCTG	GAAAAAGTTA	TTGTACGGCT	GAATACGATA	-----	-----
twiyak	A-ATTGCCGA	-----	CA	ATTCCCCTC	GTATTCCTC	-----	CGTCC	-----	-----

1751

twiana	----	CTGC	ATCC										
twiere	----	AC	GGATCGCTTC	GCATATTT									
twigri	----	CCTTT	GTCCCTCTCC	CTCTCCG									
twimel	----	CCGC	ATCCCAACAC	GCATACTT									
twimoj	----	CCCT	ATCCATCTCC	CTGGCTCT									
twiper	----	ATTTC	GTACCAATCC	AGAAATTT									
twipse	----	ATTTC	GTACCAATCC	CGAAATTTT									
twisec	----	CCGC	ATCCCAACAC	GCATATTT									
twisim	----	CCGC	ATCCCAACAC	GCATATTT									
twivir	----	CTGG	GACTCGCTAC	ATCTCTCT									
twiwil	ACTTCAATGC	ATCCGGATGG	TCAAAATTTGT	GTATATGAAC	TTGGCTCGTC	CTTCTGATCA	ATATTTTATA						
twiyak	----	CCGC	ATCCC	TGC	GCATATTT								

1821

twiana	----			ATC	GGATAT		TT	CCCA					
twiere	----			CCC	AGGCATT		TT	CCCA					
twigri	----			TCT	CCCTCT		CT	CGGC					
twimel	----			CCC	AGGCATT		TT	CCCA					
twimoj	----			CT	AGCTATCGGT	CGCTTGTCT	CTTC						
twiper	----			CCC	GCGGAAT			CAA					
twipse	----			CCC	GCGGAAT			CAA					
twisec	----			CCC	AGGCATT		TT	CCCA					
twisim	----			CCC	AGGCATT		TT	CCCA					
twivir	----			CCC	TGGCGCTCTG	CCCT	CT	TGCC					
twiwil	TAACTTATTC	GATCGGGCAG	AGTTAACTCT	ACGTGTTGCA	CATTTCGTGAC	CCCATTTGAAT	TTGTTCTTGT						
twiyak	----			CCC	AGGCATT		TT	CCCA					

1891

twiana	-----	AATC	GAG	AGAAAA	CCCA	AAG							
twiere	-----	AATC	GAG	AGAAAA	CCCA	AAG							
twigri	-----	GACT											
twimel	-----	AATC	GAG	AGAAAA	CCCA	AAG							
twimoj	-----	AGTCGGT	TG	ACAAAA	CCCA	ACG							
twiper	-----	AATCCCCAA		GGGAAA		A	AAG						
twipse	-----	AATCCCCAA		GGGAAA		A	AAG						
twisec	-----	GATC	GAG	AGAAAA	CCCA	AAG							
twisim	-----	GATC	GAG	AGAAAA	CCCA	AAG							
twivir	-----	AGTCGGGT	TG	A									
twiwil	TGCAAGGGAA	TAATAATGAT	AAAAAAATGA	AAATTAACAG	TTCTGTCAA	ATTTAAGTAA	ATTGATTAAA						
twiyak	-----	AATCAGGAG		AGAAAA	CCCA	AAG							

1961

twiana	-----												AAT
twiere	-----												AAT
twigri	-----												AAA
twimel	-----												AAT
twimoj	-----												
twiper	-----												AAT
twipse	-----												AAT
twisec	-----												AAT
twisim	-----												AAT
twivir	-----												CAA
twiwil	GTTGAAGTTT	TTGCAAGATA	TTATATACTT	TTTTAAGAAG	TAAATAAGTGG	TTAAAAATCTT	AAATTTTTAAA						
twiyak	-----												AAT

2031

twiana	AACCCAAGA			G	AGGG			C	TGTCCAAAG				
twiere	AACCCAAG				AGAA			A	GATCCAGAGC				
twigri	AACCCAGGC			GC	CGAAAA								
twimel	AACCCAAGA			GA	AACAGAA			A	AATCCAGAGC				
twimoj	AAC				GGAA								
twiper	AACCCAAAC				GAAA			A	TCTCTCGGG				
twipse	AACCCAAAC				GAAA			A	TCTCTCGGG				
twisec	AACCCAAGA			GA	AAAAAGAA			A	AATCCAGAGC				
twisim	AACCCAAGA			GA	AAAAAGAA			A	AATCCAGAGC				
twivir	AACCCA	GC		GC	GCAAAA								
twiwil	AACCCACAAC	CTTCATAGAA	TTATGTATGT	AGAAAAAACT	GATTATTTTA	TGATTTTTGA	AATCAAGAGT						
twiyak	AACCCAAG				AGAA			A	AATCCAGAGC				

2101

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	GCAG	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	CTCG	-----	-----	-----	-----	-----	-----
twimoj	-----	-----	-----	-----	-----	-----	-----
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	GCCG	-----	-----	-----	-----	-----	-----
twisim	GCCG	-----	-----	-----	-----	-----	-----
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	TCAGGAATCA	AAATGATATA	TGGCTGCCTT	TGGCTTAGAC	CTCGTCTCTA	TCATTCTCTT	TTTATTTATT
twiyak	GCAG	-----	-----	-----	-----	-----	-----

2171

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	-----	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	-----	-----	-----	-----	-----	-----	-----
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	-----	-----	-----
twisim	-----	-----	-----	-----	-----	-----	-----
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	GAAATAATTTA	TAAAAAATTA	TAAATTATTA	TAAATTAGTTT	AGCTAACTTA	TTAATTTGTT	TAAAAATGAA
twiyak	-----	-----	-----	-----	-----	-----	-----

2241

twiana	-----	-----	-----	-----	-----	TCAAGGCTCT	CTTCCCTTC
twiere	-----	-----	-----	-----	AG	TCAAGGCTCT	CTTCCATTTA
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	AG	TCAAGGCTCT	CTTCAATTTA
twimoj	-----	-----	-----	-----	-----	-----	-----
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	AG	TCAAGGCTCT	CTTCAATTTA
twisim	-----	-----	-----	-----	AG	TCAAGGCTCT	CTTCAATTTA
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	AAACAGAATT	GAAAAACAATA	TACTTTGTAA	TTAGTTAAAA	GATTTCCAAA	TCTAAACTAT	TTCCAACTTC
twiyak	-----	-----	-----	-----	AG	TCAAGGCTCT	CTTCCATTTA

2311

twiana	CAGTGGAGAA	---AAGGCA	GAAATTTTCG	AGCCGCATCC	G-AGCTCAAG	AAAAATCCAAA	-----
twiere	GCTT	---TGTATC	TGCGTTTTGC	AGCCGCCGCT	GCCGCTCGAG	AAAAATCGAAA	-----
twigri	-----	-----	TTGC	AGCCGCT	-----G	AAAAATCCAAG	AGCGA
twimel	GCTTTGAATT	T-GCTGTATT	TTGCTTTTGC	AGCCGCCGCT	GCCGCTCGAG	AAAAATCGAAA	-----
twimoj	-----	-----	TTGC	AGCCGCCGCG	A---TCGAG	AAAAGTCCAAG	AGCGAAATGC
twiper	-----	GCAATGCA	GAAATTTTCG	AGCCGCCGCC	GCCG-TTGAG	AAAAATCCAAA	-----
twipse	-----	GCAATGCA	GAAATTTTCG	AGCCGCCGCC	GCCG-TTGAG	AAAAATCCAAA	-----
twisec	GTTTTGCATT	T-GCTGTATT	T-CGTTTTGC	AGCCGCCGCT	GCCGCTCGAG	AAAAATCGAAA	-----
twisim	GCTTTGCATT	T-GCTGTAA-T	TTGTTTTTGC	AGCCGCCGCT	GCCGCTCGAG	AAAAATCAAAA	-----
twivir	-----	-----	TTGC	AGCCGCCGCG	G---ATGAG	AAAAATCCAAG	AGCGAAATGC
twiwil	ATTTTTTAATT	TCAAAAATCTT	TGCTTACTAA	AATGGCAACG	ACCTTAAGAG	AAAACCCAAT	CGT
twiyak	GCTTTGTATT	---TGTATT	TGCGTTTTGC	AGCCGCCGCT	GCCGCTCAAG	AATATCGAAA	-----

2381

twiana	-----	-----GATC	CCGCGTTGC	-CTGACGTCA	CAGTACCTGC	T-----	GGTGTGTT
twiere	-----	-----TA	CCCCGCCGC	-CTGACGTCA	-----TACCTGC	T-----	GATG--CC
twigri	-----	---AAGCGAATT	GAGCA	-CTGACGTCA	-----TACCTGC	C-----	GCAA--CG
twimel	-----	-----TC	CCCCGCCGC	-CTGACGTCA	-----TACCTGC	C-----	GATG--CC
twimoj	AGACAGAGGC	GAAATTGAG	-----	-CTGACGTCA	-----TACCTGC	-----	GATG--CG
twiper	-----	-GAGCGCAGC	GGGCGTCATA	GCTGACGTCA	-----TACCTGC	-----	GTCC--GCC
twipse	-----	-GAGCGCAGC	GGGCGTCATA	GCTGACGTCA	-----TACCTGC	-----	GTCC--GCC
twisec	-----	-----TC	CCCCGCCGC	-CTGACGTCA	-----TACCTGC	C-----	GATG--CC
twisim	-----	-----TC	CCCCGCCGC	-CTGACGTCA	-----TACCTGC	C-----	GATG--CC
twivir	AGACCGGGGC	GAAATTGAGCC	AAACGGC	-CTGACGTCA	-----TACCTGC	-----	GCCG--CA
twiwil	-----	-AGTTAACCA	AAACATTGT	-GTGATATCT	-----TATCTAC	CCAACGCAAT	GGCCATTGCC
twiyak	-----	-----TC	CCCCGCCGC	-CTGACGTCA	-----TACCTGC	T-----	GATGCCACC

2451

twiana	GTTGCTTTTC	CAGTGGCTCG	GCATCCAGCA	TCTCATTTCC	GCCATTGGAA	GCGAGCGCGC	----
twiere	G-----	-----CA	GC-----	-----TTCC	GCCATCGAGT	GCGAGCGGGA	----
twigri	G-----	-----CC	GC-----	-----CATA	GGC-----CCAGC	AGCAGCGCTG	----
twimel	G-----	-----CA	GC-----	-----TTCC	GCCATTGAGT	GGGAGCGGGA	----
twimoj	G-----	-----CC	GC-----	-----CATA	GGC-----TCGAGT	TCGCGTCAAG	----
twiper	A-----	-----TC	GCCAGCGAGG	GAGAGCCAGA	GCCA-----GAGC	GAGAGCGAGA	GCGAGCTAGA
twipse	A-----	-----TC	GCCAGCGAGG	GAGAGCCAGA	GCCA-----GAGC	GAGAGCGAGA	GCGAGCTAGA
twisec	G-----	-----CA	GC-----	-----TTCC	GCCATTGAGT	GGGAGCGGGA	----
twisim	G-----	-----CA	GC-----	-----TTCC	GCCATTGAGT	GGGAGCGGGA	----
twivir	G-----	-----CC	GC-----	-----CATA	GGC-----TCGAGA	CGTAGCCAAG	----
twiwil	G-----	-----CT	GC-----	CGATTACA	GCC-----	--GAGCGCTA	----
twiyak	G-----	-----CA	GC-----	-----TTCC	GCCATTGAGT	GCGAGTGAGA	----

2521

twiana	-----CATCC	CTTTGCG	-----G	CGCAGCAGGT	G-----	-----	-----
twiere	-----CG	-----	-----G	CCACACAGGC	GAG-----	-----	-----
twigri	-----CGTA	-----	-----G	GTTTGGCTGC	GCG-----	-----	-----
twimel	-----TG	-----	-----G	CAAGACAAGC	GAG-----	-----	-----
twimoj	-----CGG	-----	-----G	CGTTCCATGT	GCT-----	-----	-----
twiper	GAGCCCCTCC	CGAGTGTGTG	AGCGCTTTGT	GTGCGCAAGT	GTG-----	-----	-----
twipse	GAGCCCCTCC	CGAGTGTGTG	AGCGCTTTGT	GTGCGCAAGT	GTG-----	-----	-----
twisec	-----TG	-----	-----G	CAAGACTAGC	GAG-----	-----	-----
twisim	-----TG	-----	-----G	CAAGACAAGC	GAG-----	-----	-----
twivir	-----CGG	-----	-----G	TGTGTGCTGC	GCG-----	-----	-----
twiwil	-----CGGAA	CGAGCGACGA	CA-----	GTTCAATGTGC	ACGATTTTTC	CCACAGGGCA	TAAACCAATT
twiyak	-----TG	-----	-----G	CCACACAAGC	GAG-----	-----	-----

2591

twiana	CGAGCGGGAC	GGCAGCAGTG	-----AC	GTCGGGGCG	-----	-----AG	TG--AGCAG
twiere	CGAGCGGGAC	GACGATAG	-----	-----	-----	-----AG	CGGC--GGCAG
twigri	AGAGCGAGAC	AAC--TGGTG	TGTGGGCGAC	GCAGCGAAG	-----	-----AG	CG--AGCAG
twimel	CGAGCGGGAC	GACGATAG	-----	-----	-----	-----AG	CGGC--GGCAG
twimoj	AGAGCGAGAC	AAC--TAATG	TGCTGCGCAG	CAAGAAGAGC	T-----	-----AG	CAGCGAATGG
twiper	CGAGTGGGAC	AAC--TAGTG	TGAC-----	-----	-----	-----AG	CGGCGCGCAG
twipse	CGAGTGGGAC	AAC--TAGTG	TGGC-----	-----	-----	-----AG	CGGCGCGCAG
twisec	CGAGCGGGAC	GACGATAG	-----	-----	-----	-----AG	CGGC--GGCAG
twisim	CGAGCGGGAC	GACGATAG	-----	-----	-----	-----AG	CGGC--GGCAG
twivir	AGAGCGAGAC	AAC--TAGTG	TTTCGCGCAG	CGAGAAG	-----	-----AG	CG--CACAG
twiwil	AGAGCGAGAC	AACACCAAGGA	TGCCGAAGAG	AGATGGCAGC	ATATGCCCAT	GGTGTGGGAG	CG--AACGA
twiyak	CGAGCGGGAC	GACGATAG	-----	-----	-----	-----AG	CGGC--AGCAG

2661

twiana	CGAATGGCCG	ACGAGCAGC	CGCAAAATGT	CAATTTGAGA	AATGGCCGG	AAGGATCGTG	CGTCAGTTGC
twiere	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGG	AAGGATCCTG	CGTCAGTTGC
twigri	CGAATGGCAA	TTGAGCTCTG	CGCAAAACAT	CGATCTGAGC	AATGGCCGG	AAGGATCGTG	CGTCAGTTG
twimel	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGG	-----	-----
twimoj	CGAATAGCGA	ACGAGCAAAAG	CGCAAAACAT	CGATCTGAGC	AATGGCCGG	CAGGATCGTG	CGTCAGTTGT
twiper	CGAATGGCCG	TCAAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGA	AAGGATCGTG	CGTCAGATGC
twipse	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGA	AAGGATCGTA	CGTCAGATGC
twisec	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGG	AAGGATCCTG	CGTCAGTTGC
twisim	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGG	AAGGATCCTG	CGTCAGTTGC
twivir	CGAATGGCCG	ACGAGCACTG	CGCAAAACAT	CGATCTGAGC	AATGGCCGG	CAGGATCGTG	CGTCAGTTGC
twiwil	CGAATGGCCG	GCGAGCAGC	CACAAATGT	CAATTTGAGC	AATGGCCGG	CAGGATCG--	-----
twiyak	CGAATGGCCG	TCGAGCAGC	CGCAAAATGT	CAATTTGAGC	AATGGCCGG	AAGGATCCTG	CGTCAGTTGC

2731

twiana	GTTCCGTCAT	-----	-----	-----	-----	-----	-----
twiere	GTTCCGTCAG	TGCGTGGGAG	CAG-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	GTTTCGTTCTT	TGTCGCTGGG	TGCACCCACG	AGCTAAGTTA	ACGGATAGCG	GGGCGTGAGT	CAGCCAAATT
twiper	GTTTTGTGCT	CGAGTGTGTG	A-----	-----	-----	-----	-----
twipse	GTTTTGTGCT	CGAGTGTGTG	A-----	-----	-----	-----	-----
twisec	GTTTCGTCAG	TGCGTGGGAG	CAGATCGATC	-----	-----	-----	-----
twisim	GTTTCGTCAG	TGCGTGGGAG	CAGATCGATC	CAG-----	-----	-----	-----
twivir	GTTTCGTTCTT	TGCCGCTGGG	CGCACAAACAC	ACACGGGTCA	AAAACTGTAA	ACATAACGCG	GCCCCGTGAAT
twiwil	-----	-----	-----	-----	-----	-----	-----
twiyak	GTTCCGT---	-----	-----	-----	-----	-----	-----

2801

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	-----	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	GACAAGACAG	ATAAACAGTG	CAAAAGATAT	ATTCTATATA	TATAAATATA	TATTTCAATA	TATATATATA
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	-----	-----	-----
twisim	-----	-----	-----	-----	-----	-----	-----
twivir	CAG	-----	-----	-----	-----	-----	-----
twiwil	-----	-----	-----	-----	-----	-----	-----
twiyak	-----	-----	-----	-----	-----	-----	-----

2871

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	-----	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	CAGATATTGT	TGAGTGCAAA	AGTCAAGTCA	AGTAGTTTCA	AAATTGCCAA	TCAAACAATG	AGCACACGCT
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	-----	-----	-----
twisim	-----	-----	-----	-----	-----	-----	-----
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	-----	-----	-----	-----	-----	-----	-----
twiyak	-----	-----	-----	-----	-----	-----	-----

2941

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	-----	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	CGGTGTGCGC	AAAGGTGTGT	CTGGACATTA	GCTACAAGCC	AACGCTGCCC	AACATCATGG	AGCTGCAACA
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	-----	-----	-----
twisim	-----	-----	-----	-----	-----	-----	-----
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	-----	-----	-----	-----	-----	-----	-----
twiyak	-----	-----	-----	-----	-----	-----	-----

3011

twiana	-----	-----	-----	-----	-----	-----	-----
twiere	-----	-----	-----	-----	-----	-----	-----
twigri	-----	-----	-----	-----	-----	-----	-----
twimel	-----	-----	-----	-----	-----	-----	-----
twimoj	TAAATGTCATC	AAGGTCATCC	AGGTGGAGCA	GCACGCCTAT	ATGCAGCTGA	TGGATCAGCC	CACAGCGCAC
twiper	-----	-----	-----	-----	-----	-----	-----
twipse	-----	-----	-----	-----	-----	-----	-----
twisec	-----	-----	-----	-----	-----	-----	-----
twisim	-----	-----	-----	-----	-----	-----	-----
twivir	-----	-----	-----	-----	-----	-----	-----
twiwil	-----	-----	-----	-----	-----	-----	-----
twiyak	-----	-----	-----	-----	-----	-----	-----

3081

twiana	-----
twiere	-----
twigri	-----
twimel	-----
twimoj	TACAT
twiper	-----
twipse	-----
twisec	-----
twisim	-----
twivir	-----
twiwil	-----
twiyak	-----