

Table S3. 122 *Oryza* miRNA loci.

| family | gene | chromosome | begin | end | strand | miRNA sequence |
|---------|----------|-------------|-------|-------|--------|------------------------|
| | 156 156a | Contig13033 | 1493 | 1513 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156b | Contig15626 | 3509 | 3529 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156c | Contig15626 | 3900 | 3920 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156d | Contig274 | 4663 | 4683 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156e | Contig5039 | 6201 | 6221 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156f | Contig439 | 18369 | 18389 | + | UGACAGAAGAGAGUGAGCACA |
| | 156 156g | Contig1967 | 15322 | 15342 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156h | Contig6735 | 1527 | 1547 | + | UGACAGAAGAGAGUGAGCACA |
| | 156 156i | Contig62236 | 952 | 972 | + | UGACAGAAGAGAGUGAGCACA |
| | 156 156j | Contig69405 | 187 | 207 | - | UGACAGAAGAGAGUGAGCACA |
| | 156 156k | Contig5213 | 8914 | 8934 | - | UGACAGAAGAGAGAGAGCACA |
| | 156 156l | Contig6603 | 2305 | 2325 | - | CGACAGAAGAGAGUGAGCAUA |
| 159/JAW | 159a | Contig2393 | 7117 | 7137 | - | UUUGGAUUGAAGGGAGCUCUG |
| 159/JAW | 159b | Contig3622 | 3590 | 3610 | - | UUUGGAUUGAAGGGAGCUCUG |
| 159/JAW | 159c | Contig25407 | 2212 | 2232 | - | AUUGGAUUGAAGGGAGCUCUCA |
| 159/JAW | 159d | Contig12045 | 1208 | 1228 | - | AUUGGAUUGAAGGGAGCUCUCg |
| 159/JAW | 159e | Contig22151 | 1752 | 1772 | + | AUUGGAUUGAAGGGAGCUCUCU |
| 159/JAW | 159f | Contig11829 | 4932 | 4952 | - | CUUGGAUUGAAGGGAGCUCUA |
| 159/JAW | 319a | Contig7071 | 3206 | 3225 | + | UUGGACUGAAGGGUGCUCcc |
| 159/JAW | 319b | Contig21652 | 4082 | 4101 | + | uuggacugaaggugucuccc |
| | 160 160a | Contig42 | 30830 | 30850 | + | UGCCUGGCUCCCUGUAUGCCA |
| | 160 160b | Contig12962 | 3751 | 3771 | + | UGCCUGGCUCCCUGUAUGCCA |
| | 160 160c | Contig5072 | 6548 | 6568 | - | UGCCUGGCUCCCUGUAUGCCA |
| | 160 160d | Contig278 | 19015 | 19035 | + | UGCCUGGCUCCCUGUAUGCCA |
| | 160 160e | Contig3516 | 2475 | 2495 | + | UGCCUGGCUCCCUGUAUGCCG |
| | 160 160f | Contig7096 | 4672 | 4692 | + | UGCCUGGCUCCCUGAAUGCCA |
| | 162 162a | Contig2445 | 8502 | 8522 | - | UCGAUAAACCUCUGCAUCCAG |
| | 162 162b | Contig51 | 11868 | 11888 | + | UCGAUAAGCCUCUGCAUCCAG |
| | 164 164a | Contig11673 | 2054 | 2074 | + | UGGAGAAGCAGGGCACGUGCA |
| | 164 164b | Contig14283 | 4403 | 4423 | + | UGGAGAAGCAGGGCACGUGCA |
| | 164 164c | Contig36005 | 1290 | 1310 | + | UGGAGAAGCAGGGUACGUGCA |
| | 164 164d | Contig4937 | 9146 | 9166 | - | UGGAGAAGCAGGGCACGUGCU |
| | 164 164e | Contig15421 | 324 | 344 | + | UGGAGAAGCAGGGCACGUGAG |
| | 166 166a | Contig4452 | 2329 | 2349 | - | UCGGACCAGGCUUCAUUCCCC |
| | 166 166b | Contig2319 | 1100 | 1120 | - | UCGGACCAGGCUUCAUUCCCC |
| | 166 166c | Contig1481 | 3013 | 3033 | - | UCGGACCAGGCUUCAUUCCCC |
| | 166 166d | Contig9514 | 1093 | 1113 | + | UCGGACCAGGCUUCAUUCCCC |
| | 166 166e | Contig7441 | 4253 | 4273 | + | UCGGACCAGGCUUCAUUCCCC |
| | 166 166f | Contig1210 | 18646 | 18666 | - | UCGGACCAGGCUUCAUUCCCC |
| | 166 166g | Contig10486 | 2698 | 2718 | + | UCGGACCAGGCUUCAUUCUC |
| | 166 166h | Contig38876 | 1710 | 1730 | + | UCGGACCAGGCUUCAUUCUC |
| | 166 166i | Contig3185 | 377 | 397 | + | ucggaucaggcuucauuccuc |
| | 166 166j | Contig75985 | 6 | 26 | - | ucggaucaggcuucauuccuc |
| | 166 166k | Contig38876 | 1881 | 1901 | + | UCGGACCAGGCUUCAUUCUU |
| | 166 166l | Contig7215 | 4788 | 4808 | + | UCGGACCAGGCUUCAUUCUU |
| | 167 167a | Contig1917 | 10902 | 10922 | - | UGAAGCUGCCAGCAUGAUCUA |
| | 167 167b | Contig5097 | 1075 | 1095 | - | UGAAGCUGCCAGCAUGAUCUA |
| | 167 167c | Contig981 | 7221 | 7241 | + | UGAAGCUGCCAGCAUGAUCUA |
| | 167 167d | Contig1 | 16472 | 16492 | - | UGAAGCUGCCAGCAUGAUCUG |
| | 167 167e | Contig10736 | 6185 | 6205 | - | UGAAGCUGCCAGCAUGAUCUG |
| | 167 167f | Contig15194 | 2195 | 2215 | - | UGAAGCUGCCAGCAUGAUCUG |

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|-----|------|-------------|-------|-------|---|------------------------|
| 167 | 167g | Contig15604 | 3032 | 3052 | - | UGAAGCUGCCAGCAUGAUCUg |
| 167 | 167h | Contig1917 | 7095 | 7115 | - | UGAAGCUGCCAGCAUGAUCUG |
| 167 | 167i | Contig3960 | 12432 | 12452 | - | UGAAGCUGCCAGCAUGAUCUG |
| 168 | 168a | Contig5181 | 6314 | 6334 | + | UCGCUUGGUGCAGAUCGGGAC |
| 168 | 168b | Contig725 | 2290 | 2310 | + | agggcuuggugcagcucgggaa |
| 169 | 169a | Contig267 | 1556 | 1576 | + | CAGCCAAGGAUGACUUGCCGA |
| 169 | 169b | Contig13498 | 6461 | 6481 | + | CAGCCAAGGAUGACUUGCCGG |
| 169 | 169c | Contig675 | 3784 | 3804 | + | CAGCCAAGGAUGACUUGCCGG |
| 169 | 169d | Contig45157 | 681 | 701 | + | UAGCCAAGGAUGAAUUGCCGG |
| 169 | 169e | Contig2398 | 8572 | 8592 | + | uagccaaggaugacuugccgg |
| 169 | 169f | Contig1393 | 18877 | 18897 | - | UAGCCAAGGAUGACUUGCCUa |
| 169 | 169g | Contig3158 | 5985 | 6005 | - | UAGCCAAGGAUGACUUGccua |
| 169 | 169h | Contig12780 | 1801 | 1821 | + | UAGCCAAGGAUGACUUGccug |
| 169 | 169i | Contig20759 | 2212 | 2232 | - | UAGCCAAGGAUGACUUGccug |
| 169 | 169j | Contig30457 | 1664 | 1684 | - | UAGCCAAGGAUGACUUGccug |
| 169 | 169k | Contig38505 | 1415 | 1435 | + | UAGCCAAGGAUGACUUGccug |
| 169 | 169l | Contig4845 | 5060 | 5080 | - | uagccaaggaugacuugccug |
| 169 | 169m | Contig4845 | 7663 | 7683 | - | UAGCCAAGGAUGACUUGccug |
| 169 | 169n | Contig10799 | 6187 | 6207 | + | UAGCCAAGAAUGACUUGccua |
| 169 | 169o | Contig29602 | 1007 | 1027 | + | UAGCCAAGAAUGACUUGccua |
| 169 | 169p | Contig21032 | 3041 | 3062 | + | UAGCCAAGGACAaacuugccgg |
| 169 | 169q | Contig99778 | 87 | 107 | - | UAGCCAAGGAGACUGcccaug |
| 171 | 171a | Contig15726 | 6391 | 6411 | + | UGAUUGAGCCGCGCCAAUAUC |
| 171 | 171b | Contig14063 | 4647 | 4667 | + | UGAUUGAGCCGUGCCAAUAUC |
| 171 | 171c | Contig1580 | 11153 | 11173 | - | UGAUUGAGCCGUGCCAAUAUC |
| 171 | 171d | Contig2941 | 11346 | 11366 | + | UGAUUGAGCCGUGCCAAUAUC |
| 171 | 171e | Contig3749 | 5908 | 5928 | + | UGAUUGAGCCGUGCCAAUAUC |
| 171 | 171f | Contig3911 | 11181 | 11201 | + | UGAUUGAGCCGUGCCAAUAUC |
| 171 | 171g | Contig13529 | 3267 | 3287 | + | gagGUGAGCCGAGCCAAUAUC |
| 172 | 172a | Contig7420 | 8032 | 8052 | + | AGAAUCUUGAUGAUGCUGCAU |
| 172 | 172b | Contig11136 | 6459 | 6479 | - | GGAAUCUUGAUGAUGCUGCAU |
| 172 | 172c | Contig3578 | 6657 | 6677 | + | UGAAUCUUGAUGAUGCUGCAC |
| 393 | 393 | Contig4493 | 10056 | 10076 | + | UCCAAAGGGAUCGCAUUGAUC |
| 394 | 394 | Contig15318 | 315 | 335 | + | UUGGCAUUCUGUCCACCUC |
| 395 | 395a | Contig16544 | 4585 | 4605 | + | GUGAAGUGCUUGGGGGAACUC |
| 395 | 395b | Contig16544 | 4745 | 4765 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395c | Contig16544 | 4886 | 4906 | + | GUGAAGUGUUUGGAGGAACUC |
| 395 | 395d | Contig16544 | 5024 | 5044 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395e | Contig16544 | 5167 | 5187 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395f | Contig16544 | 5308 | 5328 | + | GUGAAGUAUUUGGGGGAACUC |
| 395 | 395g | Contig16544 | 5446 | 5466 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395h | Contig32015 | 1661 | 1681 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395i | Contig32015 | 1823 | 1843 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395j | Contig32015 | 1996 | 2016 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395k | Contig32015 | 2156 | 2176 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395l | Contig32015 | 2331 | 2351 | + | gugaaguguuuggggggaacuc |
| 395 | 395m | Contig32015 | 2506 | 2526 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395n | Contig5127 | 4895 | 4915 | + | gugaaGUGUUUGGGGGAACUC |
| 395 | 395o | Contig15161 | 2207 | 2227 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395p | Contig13097 | 4446 | 4466 | - | gugaagcguuuggggggaauc |
| 395 | 395q | Contig13097 | 5098 | 5118 | - | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395r | Contig48729 | 1123 | 1143 | + | GUGAAGUGUUUGGGGGAACUC |
| 395 | 395s | Contig15161 | 2859 | 2879 | + | gugaagcguuuggggggaauc |

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|-----|------|-------------|-------|-------|---|-----------------------|
| 396 | 396a | Contig1552 | 6429 | 6449 | + | UUCCACAGCUUUCUUGAACUG |
| 396 | 396b | Contig6441 | 8392 | 8412 | + | UUCCACAGCUUUCUUGAACUG |
| 396 | 396c | Contig1552 | 13825 | 13845 | - | UUCCACAGCUUUCUUGAACUU |
| 397 | 397a | Contig146 | 12104 | 12124 | - | UCAUUGAGUGCAGCGUUGAUG |
| 397 | 397b | Contig414 | 5761 | 5781 | + | UUAUUGAGUGCAGCGUUGAUG |
| 398 | 398a | Contig11355 | 3212 | 3232 | + | UGUGUUCUCAGGUCACCCCUU |
| 398 | 398b | Contig14993 | 2506 | 2526 | - | UGUGUUCUCAGGUCGCCCCUG |
| 399 | 399a | Contig11471 | 1413 | 1433 | + | UGCCAAAGGAGAAUUGCCCUG |
| 399 | 399b | Contig15629 | 4245 | 4265 | - | UGCCAAAGGAGAAUUGCCCUG |
| 399 | 399c | Contig9607 | 6567 | 6587 | - | UGCCAAAGGAGAAUUGCCCUG |
| 399 | 399d | Contig9306 | 3519 | 3539 | + | ugccaaaggagaguugcccug |
| 399 | 399e | Contig11471 | 282 | 302 | - | UGCCAAAGGAGAUUUGCCCAG |
| 399 | 399f | Contig28748 | 2409 | 2429 | - | UGCCAAAGGAGAUUUGCCCAG |
| 399 | 399g | Contig3634 | 914 | 934 | + | UGCCAAAGGAGAUUUGCCCCG |
| 399 | 399h | Contig9607 | 8629 | 8649 | + | UGCCAAAGGAGACUUGCCCAG |
| 399 | 399i | Contig2354 | 6504 | 6524 | - | UGCCAAAGGAGAGCUGCCCUG |
| 399 | 399j | Contig772 | 12030 | 12050 | - | ugccaaaGGAGAGUUGCCCUA |
| 399 | 399k | Contig31542 | 1939 | 1959 | - | UGCCAAAGGAAAUUUGCCCCG |

All *Oryza* miRNAs identified by computational prediction and homology to validated miRNAs are listed as are the portions of each locus computationally predicted to have miRNA encoding potential. Nucleotide regions are in lowercase. For miRNA families that have not been cloned, the 5' end of the sequence is based on mobility on a Northern blot. For miRNA loci that are related to a cloned miRNA, the 5' and 3' ends are based on the cloned miRNA. If miRNAs have heterogeneity at either the 5' or 3' end, the ends of the sequences listed should be corrected to the sequence length containing the miRNA, miRNA*, and intervening sequence.

| sequence predicted to encode miRNA | hairpin arm | hairpin length | hairpin sequence |
|------------------------------------|-------------|----------------|------------------|
| GGUGACAGAAGAGAGUGAGCACACGUGGUUG | 5' | 89 | ACUAGGAGGGU |
| GUCUGACAGAAGAGAGUGAGCACACACGGUGC | 5' | 86 | UUUGGAGGUCU |
| GGCUGACAGAAGAGAGUGAGCACACAUGGUGA | 5' | 91 | GAGGUGAGGCU |
| UUGACAGAAGAGAGUGAGCACACAGCGUG | 5' | 84 | CUCAUGAGAUU |
| GGUGACAGAAGAGAGUGAGCACACCG | 5' | 86 | UGGCGCGAGG |
| AGUUGACAGAAGAGAGUGAGCACAC | 5' | 183 | UGGUGGCAGU |
| GGCUGACAGAAGAGAGUGAGCACACAGCGGG | 5' | 112 | CGCGGCUGGC |
| UUGUUGACAGAAGAGAGUGAGCACACCG | 5' | 86 | GCGAGAUUGU |
| GGUGACAGAAGAGAGUGAGCACACCG | 5' | 86 | CGCUGGGCGG |
| UUGUUGACAGAAGAGAGUGAGCACACCG | 5' | 86 | GCGAGAUUGU |
| UGACAGAAGAGAGAGAGCAC | 5' | 86 | UUGAGAGUGA |
| GCCGACAGAAGAGAGUGAGCAUAUAU | 5' | 136 | GCUAGGGAGCU |
| UCUUUGGAUUGAAGGGAGCUCUG | 3' | 252 | GUUGUGGACG |
| ACUCUUUGGAUUGAAGGGAGCUCUG | 3' | 168 | GGUUAUGAAG |
| UGAUUGGAUUGAAGGGAGCUCCAC | 3' | 177 | GAGGAGGAAG |
| UGAUUGGAUUGAAGGGAGCUCC | 3' | 169 | UGAUGUGAGG |
| UUGAUUGGAUUGAAGGGAGCUCCU | 3' | 171 | GAUGAAGAAG |
| UUAUGCUUGGAUUGAAGGGAGCUCUA | 3' | 168 | GAAGAAGAAG |
| UGGUUGGACUGAAGGGUGCUC | 3' | 171 | UGUGUAAGAA |
| | 3' | 177 | GAUGGAUGGA |
| GUGUGCCUGGCUCCCUUGUAUGCCACACA | 5' | 82 | GUGUAGUGUG |
| AGCGUGCCUGGCUCCCUUGUAUGCCACUC | 5' | 82 | CUUGAGAGCG |
| AUGUGCCUGGCUCCCUUGUAUGCCACUC | 5' | 87 | AUUGGGAAUG |
| GAUAUGCCUGGCUCCCUUGUAUGCCACUCG | 5' | 130 | AAAGGGGAUA |
| GGAUAUGCCUGGCUCCCUUGUAUGCCGC | 5' | 94 | GUAGGGGAUA |
| CUGCCUGGCUCCCUUGAAUGCCAUC | 5' | 80 | GGAUUAACGC |
| GGAUUCGAUCGAUAAACCUCUGCAUCCAGU | 3' | 156 | GUGGUGAUGC |
| GAAUCGAUCGAUAAGCCUCUGCAUCCAGA | 3' | 114 | UGGGUGAUGC |
| ACGGUGGAGAAGCAGGGCACGUGCA | 5' | 93 | CCGUGCACGG |
| CCGCGUUGGAGAAGCAGGGCACGUGCAUGC | 5' | 122 | AGGACCGCGU |
| UUGUUGGAGAAGCAGGGUACGUGCAA | 5' | 99 | AGGUUCUUGU |
| CCGUGCUGGAGAAGCAGGGCACGUGCUC | 5' | 74 | CAAACCGUGC |
| AGGGUGGAGAAGCAGGGCACGUGAGC | 5' | 112 | UUGUGCAGGG |
| UCUCGGACCAGGCUUCAUUCCCCUCAGA | 3' | 111 | UUGCUUCUGA |
| UCUCGGACCAGGCUUCAUUCCCCC | 3' | 170 | UUCAUUUUGA |
| UUCGGACCAGGCUUCAUUCCCCC | 3' | 102 | UGGCAGUUGA |
| UCUCGGACCAGGCUUCAUUCCCCUCAAGU | 3' | 93 | UUCACUUUGA |
| UCUCGGACCAGGCUUCAUUCCCCUCAGA | 3' | 119 | UUGUUUUUGG |
| UCUCGGACCAGGCUUCAUUCCCCUCAACA | 3' | 77 | AUCUUGUUGA |
| UCUCGGACCAGGCUUCAUUCCUCACA | 3' | 125 | AGCAUGGUGU |
| UCGGACCAGGCUUCAUUCCUCGCAA | 3' | 99 | GGUGGCUUGU |
| | 3' | 125 | AGAUAGGUGU |
| | 3' | 120 | AGAUAGGUGU |
| GGAGCCUCGGACCAGGCUUCAUCCCCU | 3' | 107 | AUUAGGUUAA |
| CUCGGACCAGGCUUCAUCCCCU | 3' | 97 | GUUAGGUUAA |
| GAGUGAAGCUGCCAGCAUGAUCUAGCUCUG | 5' | 115 | UGUGAAUGAG |
| CGUGAAGCUGCCAGCAUGAUCUAACU | 5' | 127 | AGAGAAAGCG |
| GAGUGAAGCUGCCAGCAUGAUCUAGCUC | 5' | 127 | AGGGAACGAG |
| AGCUGAAGCUGCCAGCAUGAUCUGAUGA | 5' | 90 | CAUUAGGAGC |
| AUGAAGCUGCCAGCAUGAUCUGGU | 5' | 253 | UGUGAGAGAA |
| UGGAUGAAGCUGCCAGCAUGAUCUGAUGA | 5' | 93 | CACAAGUGGA |

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|--------------------------------|----|-----------------|
| AUCUUCCACAGCUUUCUUGAACUGC | 5' | 134 CUUUGUGAUCU |
| GUCUUCCACAGCUUUCUUGAACUGC | 5' | 96 CUUUGUGGUCU |
| CAUGCCUUUCCACAGCUUUCUUGAACUUCU | 5' | 121 UGCCAUGCCU |
| GCAUCAUUGAGUGCAGCGUUGAUGAA | 5' | 94 AUCAAAUGCAU |
| | 5' | 98 AGGGAAGGCAU |
| ACUGUGUUCUCAGGUCACCCCUUUGGG | 3' | 95 GCUGAACCCAC |
| CGUGUGUUCUCAGGUCGCCCCUGCCG | 3' | 68 GGAGUUCCUA |
| GUGCCAAAGGAGAAUUGCCCUGC | 3' | 129 CUGUGAAUUAC |
| CGUGCCAAAGGAGAAUUGCCCUGCC | 3' | 77 GUGAGAAUCAC |
| CGUGCCAAAGGAGAAUUGCCCUGC | 3' | 90 CGGCGAAUUAC |
| | 3' | 266 AAGACAGUAGL |
| ACCACUGCCAAAGGAGAAUUGCCCAG | 3' | 98 ACAUGCAUUAC |
| UGUUCUCUCUGCCAAAGGAGAAUUGCCCAG | 3' | 97 UGGUGGAUUAC |
| UCUGCCAAAGGAGAAUUGCCCGGCGAU | 3' | 98 AUGUGCAUUGC |
| CCACUGCCAAAGGAGACUUGCCCAGCAA | 3' | 80 CCAUGCAUUAC |
| CCCUGCCAAAGGAGAGCUGCCCUGCCA | 3' | 96 GUGAGAAUCAC |
| GGAGAGUUGCCCUAAAACUGGA | 3' | 86 AGUCCAGUUUC |
| ACUGCCAAAGGAAAUUUGCCCCGGAAUUCA | 3' | 86 AGCUGCAUUGC |

ed . The sequences of the mature miRNAs are shown,
æotides in the mature miRNAs outside of the computationally predicted
s determined by PCR of the miRNA and the length is inferred from
e inferred from the ends of the cloned homolog. Because many plant
nsidered to be approximations. Hairpin length is defined as the minimal

ugacagaagagagugagcacaCGUGGUUGUUUCCUUGCAUAAUUGAUGCCUUAUGCUUGGAGCUACGCGUGU
ugacagaagagagugagcacaCACGGUGCUUUUCUUGAGCAUGCAAGAGCCAUGCUGGGAGCUGUGCGUGCUU
ugacagaagagagugagcacaCAUGGUGACUUUCUUGCAUGCUGAUAUGGACUCAUGCUIUGAAGCUAUGUGL
JgacagaagagagugagcacaCAGCGUGAUGGGCCGGCAUAAAUCUAUCCCGUCCUCGCCGCGUGCUCACU
ugacagaagagagugagcacaCGGCCGGGCGUGACGGCACCCGGCGGGCGUGCCGUCGCGGCCGCGUGCU
ugacagaagagagugagcacaCAGCGGCCAGACUGCAUCGAUCUAUCAAUUCUCCCUUCGACAGGAUAGCU
ugacagaagagagugagcacaCAGCGGGCAGACUGCAUCUGAAAUAAACUGGUGACGACGAAGAAGACGAC
ugacagaagagagugagcacaCGGCGCGGCGGCUAGCCAUCGGCGGGAUGCCUGCCCCCGCCGCGUGCUC
ugacagaagagagugagcacaCGGCCGGGCGGAACGGCACCCGGCGGAUGUGCCGUCGCGGCCGCGUGCU
ugacagaagagagugagcacaCGGCGCGGCGGCUAGCCAUCGGCGGGAUGCCUGCCCCCGCCGCGUGCU
ugacagaagagagagagcacaACCCGACAGCAGCGACGACGGCGGUCGCUUCUGCCAGGGCCGUGUGCUCI
cgacagaagagagugagcauaUAUAGUUCUUCUUCUUGCAUAUUGUGGUAUAUUGUGUGUUGACUGAAGAGAL
UUGAGCUCCUUUCGGUCCA AAAAGGGGUGUUGCUGUGGGUCCGAUUGAGCUGCUGGGUUAUGGAUC
UGGAGCUCCUUUCGUUCCAUAUGAAAGGUUUAUCUGAAGGGUGAUACAGCUGCUUGUUAUGGUUUC
AGGAGCUCCUUUCGAUCCAUAUCAGGAGAGGAAGUGGUAGGAUGCAGCUGCCGAUUAUGGAUACC
AGGAGCUCCUUUCGAUCCAUAUCAGGAGAGGAAGUGGUUGGAUGCAGCUGCCGGUUAUGGAUACI
AAGAGCUCCCUUUCGAUCCAUAUCAGGAGAGGAAGUGGUAGGAUGCAGCUGCCGGUUAUGGAUAC
ACGAGCUCCCUUUCGAUCCAUAUCAGGAGAGGAAGUGGUAGGAUGCAGCUGCCGGUUAUGGAUACC
3AGAGCUCUCUUCAGUCCACUCUCAGAUGGCUGUAGGGGUUUUAUJAGCUGCCGAUUAUCCAUAUC
AGAGAGCGUCCUUCAGUCCACUCAUGGGCGGUGCUAAGGGUCGAUUJAGCUGCCGACUCAUUCACC
ugccuggcucccuguaugccaCACAUGUAGACCAACCCAUGGUGUCUGGUUUGCCUACUGGGUGGCGUGCAA
ugccuggcucccuguaugccaCUCAUGUAGCCCAAUCCAUGGUGUGUUUGGAUGCUGUGGGUGGCGUGCAA
ugccuggcucccuguaugccaCUCAUCUAGAGCAACAAACUUCUGCGAGAGGUUGCCUAUGAUGGAUGGCGI
JgccuggcucccuguaugccaCUCGCGUAGCUGCCAAACUCAGUUGAAACAACUGCCUUCUCCCGGCGAGAL
ugccuggcucccuguaugccgCUCGCAUGGCUGCCAACCCAAUGAACUCGAUCUCGUUGUUGGCCGCGUGCG
ugccuggcucccugaaugccaUCCGAGAAGCGUGCCGCUUGUGGCCGGCGUGCUUCCUGGUUGGCAUUGAGG
CUGGGCGCAGUGGUUUUAUCGAUCCCUUCCUGCCUUGUGGCGCUGAUCCAGGAGCGGCGAAUUC
CUGGGCGCAGUGGUUUUAUCGAUCUCUUCUCCUGCCUUGUGCUGCUCUCCGAUCGAUGCCCGUGCUGAL
uggagaagcagggcacgugcaUUACCAUCCACUCGCCUGCCGGCCGCCGGCCGCCAUUGCCAUGGAUGGUI
uggagaagcagggcacgugcaUGCAUAUGUUAUCAUCAUCAUCUUCUUCUCCUCCUCUAGCUCCAGCCUUGU
uggagaagcagggcuacgugcaAAUUGCACACCCGUUGGUCGAGCUAAUUAACAAGCUCUGACGACCAUGGU
JggagaagcagggcacgugcuCGACGGCGGGGCGUGGCUGGCCGGCCGGCCUUGCAGCAUGUGCGCUCCUUC
uggagaagcagggcacgugagCGGCCAUCCAGUGUAGCUUCGCUGCGCGUCCAUGGCGGCGAACGCGCGU
GUGGAAUGUUGUCUGGUUUAAGGUCUCAUACACCUUGUGGUUUUGAGGAUGAUUUGUGCAAGGUUI
3GGGAAUGUUGUCUGGCUCGGGGCUACUUUUAAUUCUCUCUCUUUUUGAUUAUCUUCUUUUCUGCA
GGGGAUUGUUGUCUGGUCCGAGACCUAACACCGGGCGGAUUGGCGGAUUCAGCUGCAGCUAAGCA
3GGGAAUGUUGUCUGGCUCGAGGUGCAUGGAGAAACCUCUGAUCGAUCAGGUUUUGAUCUGUAGAG/
GUGGAAUGUUGUCUGGUUUAAGGCCCUUAGGAUGUGUGAUUUUUUGAUGGUUUUAUGCAUUAUCUI
3AGGAAUGUUGUCUGGCCUGAGAUUCGUACCAUAGUGGUGGGUACACGUGGACGGUCucggaccagggcu
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