

The diagram illustrates a segment of a double-stranded DNA molecule. The top strand runs from left to right, starting at its 5' end with a phosphate group (represented by a blue circle) attached to a deoxyribose sugar (blue pentagon). The sequence of bases in the top strand is U-A-G-A-U-C-A-C-C-A-C-U-U-G-C-C-A-U-G-G-U-G. The bottom strand runs from right to left, starting at its 3' end with a phosphate group (red circle) attached to a deoxyribose sugar (red pentagon). The sequence of bases in the bottom strand is G-G-A-A-U-C-U-A-G-U-G-G-A-C-A-G-U-A-C-U-A-C. Complementary base pairs are connected by hydrogen bonds: A-T (2 bonds), C-G (3 bonds), G-C (3 bonds), and U-A (2 bonds).



5'- ucagggucauccaagaagacagggugaugcugc <u>uaa</u> gaucaccac <u>cuugcc</u> auggg <u>uagccgcguuu</u> caucaagacaggguggu <u>gaucuaagg</u> aucaaucaucauuuuuag -3'	exp		
(((((.....)).)).....(((((((.(.((((((((((((((.(((((((.(.....)).)))))).)))))).)))))).)).)).)))))).....	reads	nm	sample
.....aucaugacagguggugaucu.....	1	0	seq
.....aucaugacagguggugaucuaaU.....	3	1	seq
.....ucaugacagguggugaucuaaU.....	3	1	seq