

i : 0 1 2 3 4 5 6 7 8 9

Ax : 0 0 0 1 1 1 1 1 0

X : A C C A T T C T A - - C

Y : A C G - - - - T G T T C

Ay : 0 0 0 1 1 1 1 1

j : 0 1 2 3 4 5 6 7

The diagram illustrates a sequence alignment between two sequences, Ax and Ay. The sequences are represented as rows of characters. Ax is 0 0 0 1 1 1 1 1 0 and X is A C C A T T C T A - - C. Ay is 0 0 0 1 1 1 1 1 and Y is A C G - - - - T G T T C. A red box highlights the region from index 4 to 7 of both sequences, where Ax has '1's and X has 'T's, and Ay has '1's and Y has 'T's. A green box highlights the region from index 5 to 6 of both sequences, where Ax has '1's and X has 'C's, and Ay has '1's and Y has 'G's'. This indicates a match between the '1' characters in Ax and Ay, and the 'T' characters in X and Y.