

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 Ay is 0 0 0 1 1 1 1 1. The alignment is shown by the overlapping characters in the rows. A red box highlights the region where Ax has '1' and Ay has '1', specifically from index 4 to 7. A green box highlights the region where Ax has '1' and Ay has '1', specifically from index 5 to 6. The alignment shows that the sequences are identical from index 4 to 7, with a gap in Ay at index 8.