

A.

```
BR3-T_arp2      ACAACACCAACTCCAAATAAATGGTATCAGTGGAGCAATAAAATCTCTTGTGTTGATAAG
BR3-3X_chr      -----T.....GG..T..T..T..T...CTA.A..CATG...C.T.
BR3-T_arp1      .....C.....AA...TG.....
BR3-3X_p1       .....C.....AA...TG.....
```

```
BR3-T_arp2      TAT-----AATAACAAATATTATATTAAAAAA---GATG-ATGCTATTATTATTTACAA
BR3-3X_chr      AC.GATGACCA...G....C.....CT..GG..C.AG.C..A....C.CA....ACTGC
BR3-T_arp1      -----.....GG..C---A-
BR3-3X_p1       ...-----.....GG..C---A-
```

```
BR3-T_arp2      CAACTGTTTTAGATTGGGTAAAAACAACAAATCAGTTTGCCTTGGTTGATAGCACCAGAA
BR3-3X_chr      ....T....G..G.....T.....
BR3-T_arp1      .....A.....A.T....G....AT.....
BR3-3X_p1       .....A.....A.T....G....AT.....
```

```
BR3-T_arp2      CCGAAACTTGCACTGCGCCAGATTGCTTAACTGTGGAT
BR3-3X_chr      -----C-----
BR3-T_arp1      AG.....A..C.AAAGC..C.....T..
BR3-3X_p1       AG.....A..C.AAAGC..C.....T..
```

B.

```
BR3-T_arp2      TGATGATTTTTCCGCAATTGAAATAACAAATAAAGATAATCACTCTGCCAACTTTAAGCCG
BR3-3X_chr      .....
BR3-T_arp1      .....C....A.....A.T.....
BR3-3X_p1       .....A.....A.T.....
```

C.

```
BR3-T_arp1      GAAAGCAAATGGATACGACAATATTCGTGGTTATGGGTGCTAGTCAATTAAACAATCTTTT
BR3-3X_chr      .....C....G...A.....
BR3-3X_p1       .....
```