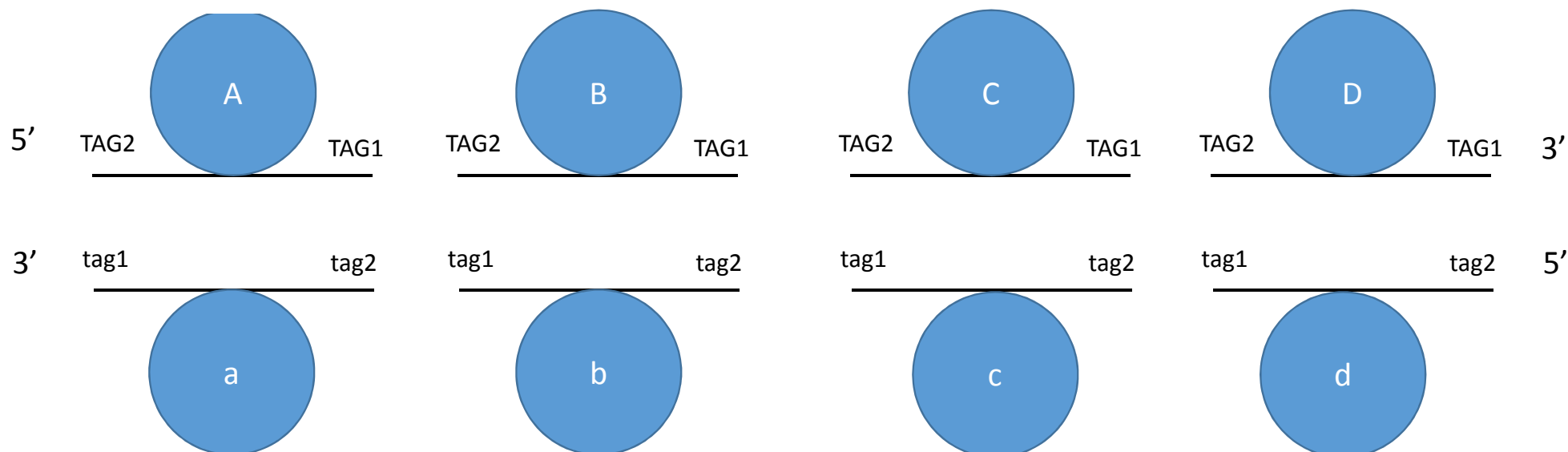




- The coordination of TAGs mappings:

“->” means for TAG1

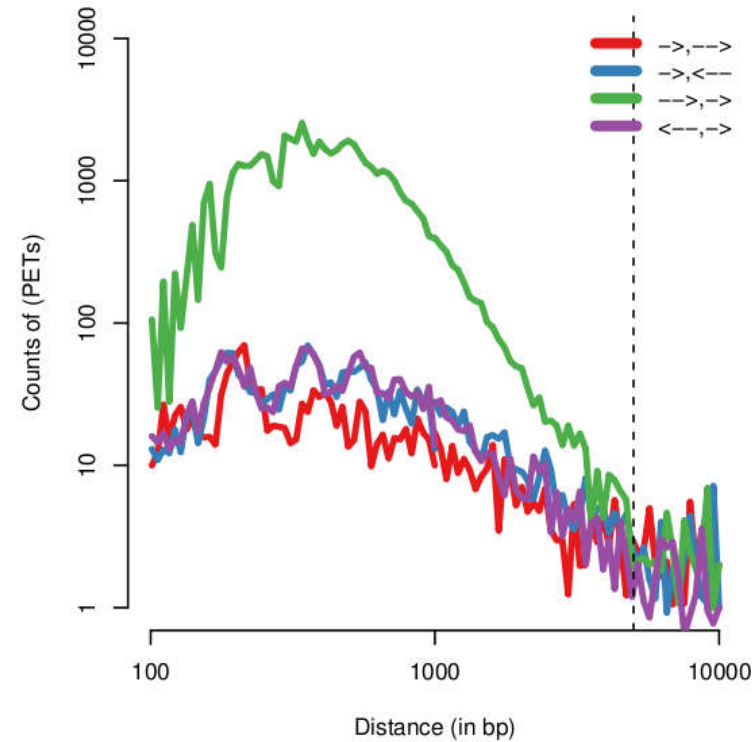
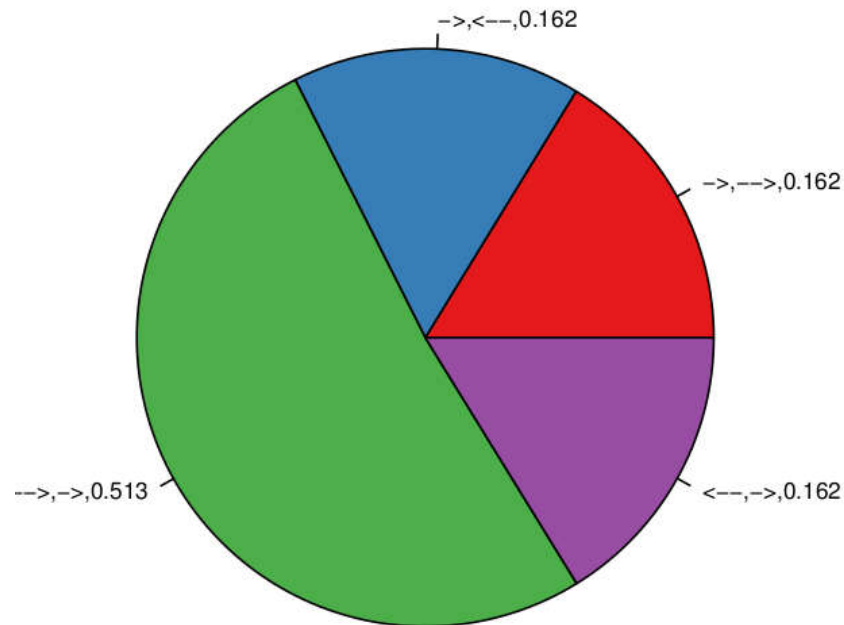
“-->” means for TAG2



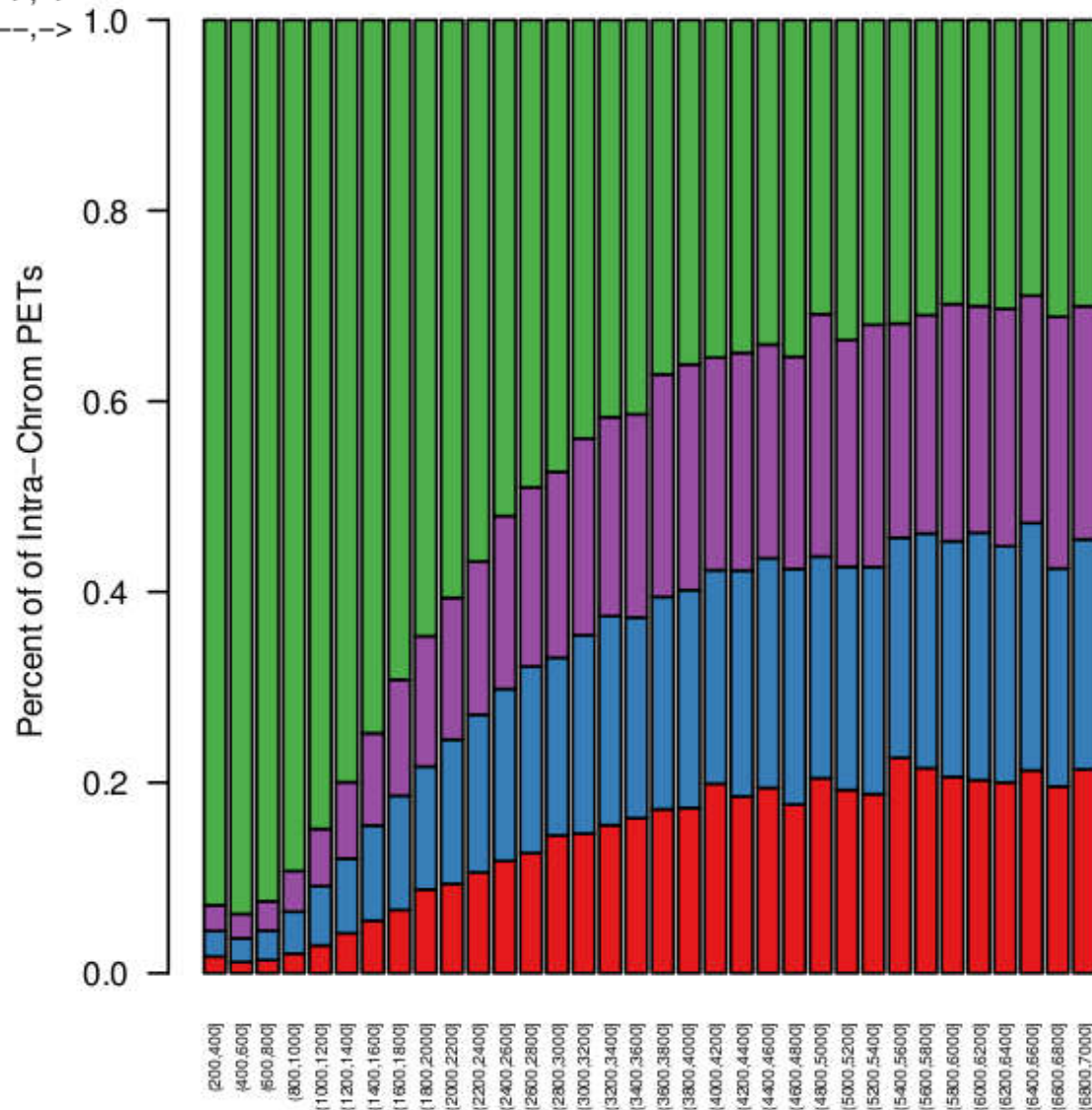
Type	Self-ligation	Inter-ligation
->,->	NA	yes
->,<--	NA	yes
-->,->	yes	yes
<--,->	NA	yes

## Four types classification for intra-chrom PETs

Classification of Intra-Chrom PETs



Only partial type3 intra-chrom PETs could be generated from self-ligation. Four types of intra-chrom PETs shared with the same possibility generated from inter-ligation.



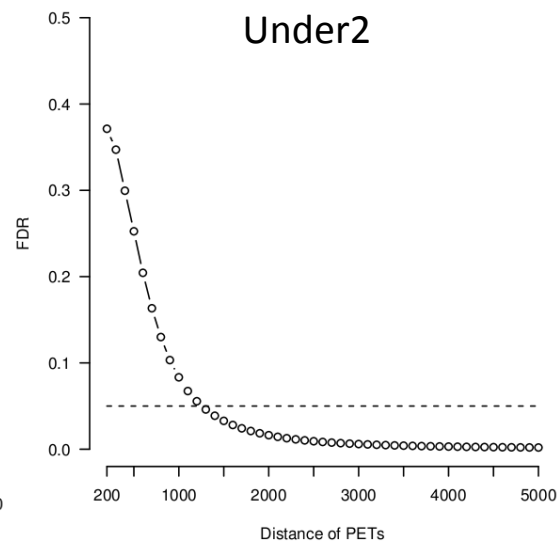
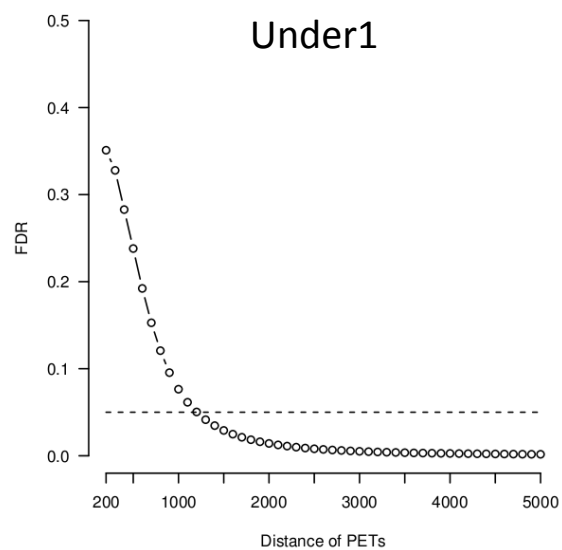
FDR calculation:

For distance L:

Total: Type1+Type2+Type3+Type4 (Distance>L)

Aver= means(Type1+Type2+Type4) (Distance >L)

**FDR=(Total-4\*Aver)/Total**



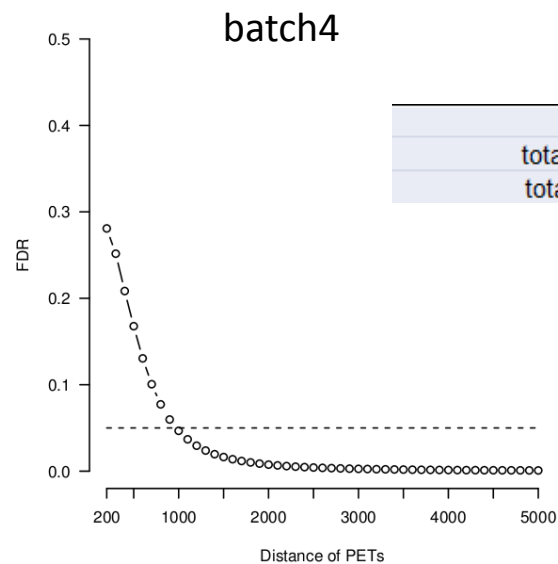
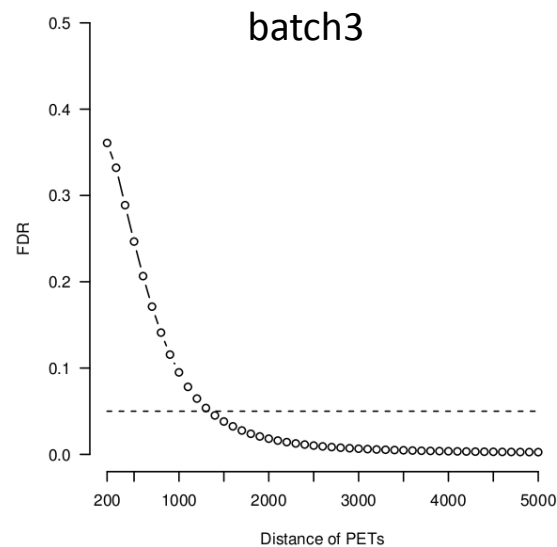
## Self-ligation:

Type3 PETs with distance less than 1200bp

## Inter-ligation:

Type1 , Type2, Type4 PETs

Type3 PETs with distance more than 1200bp



	Under1	Under2	Batch3	Batch4
total_inter_ligation	7585933	7141502	7056501	7220818
total_self_ligation	1034674	1069677	1031751	674669