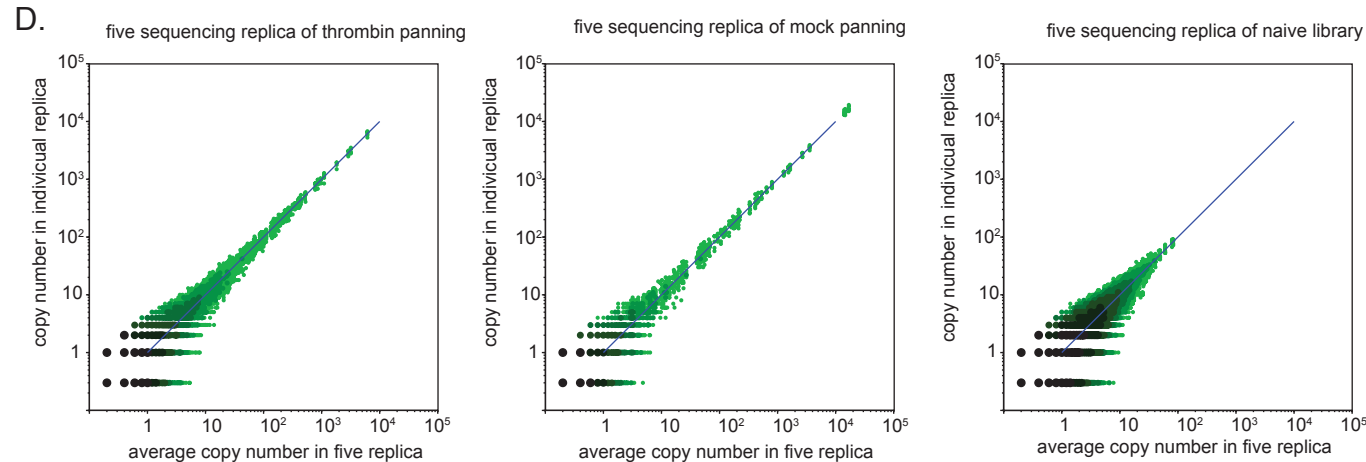


**C.**

Length constant region variable region constant region

<51> GCTGCTGGGGCCATGCTCGACTTTCCTATACCCAGATCTATCCCGCCTGAG  
 <52> GCTGCTGGGGCCATGCTCGACTTTCCTATACCCAGATCTATCCCGCCTGAG  
 <52> GCTGCTGGGGCCATGCTCACTCAGATCCCCCCTCCAGATCTATCCCGCCTGAG  
 <50> GCTGCTGGGGCCATGGACGCATTCGCCGCGCCAGATCTATCCCGCCTGAG  
 <50> GCTGCTGGGGCCATGCTCGACTT CCTATACCCAGATCTATCCCGCCTGAG

correct read length, correct constant regions  
 insertion in the constant region  
 homopolymer read error  
 deletion in the constant region (read error)  
 deletion in the variable region (read error)



**E.**

$$X(i) = \sum_{k=1}^5 \frac{(N(i,k) - M(i))^2}{M(i)} \quad M(i) = \sum_{k=1}^5 \frac{N(i,k)}{5}$$

$N(i,k)$  - normalized copy number of seq.  $i$  in replica  $k$   
 $M(i)$  - mean copy number

