

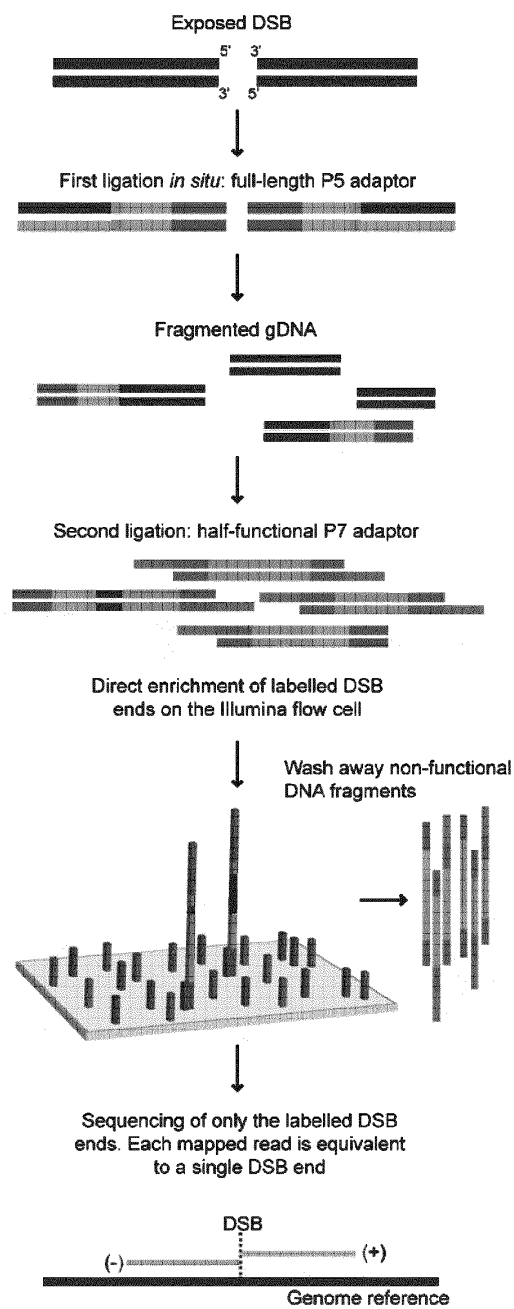


Figure 1

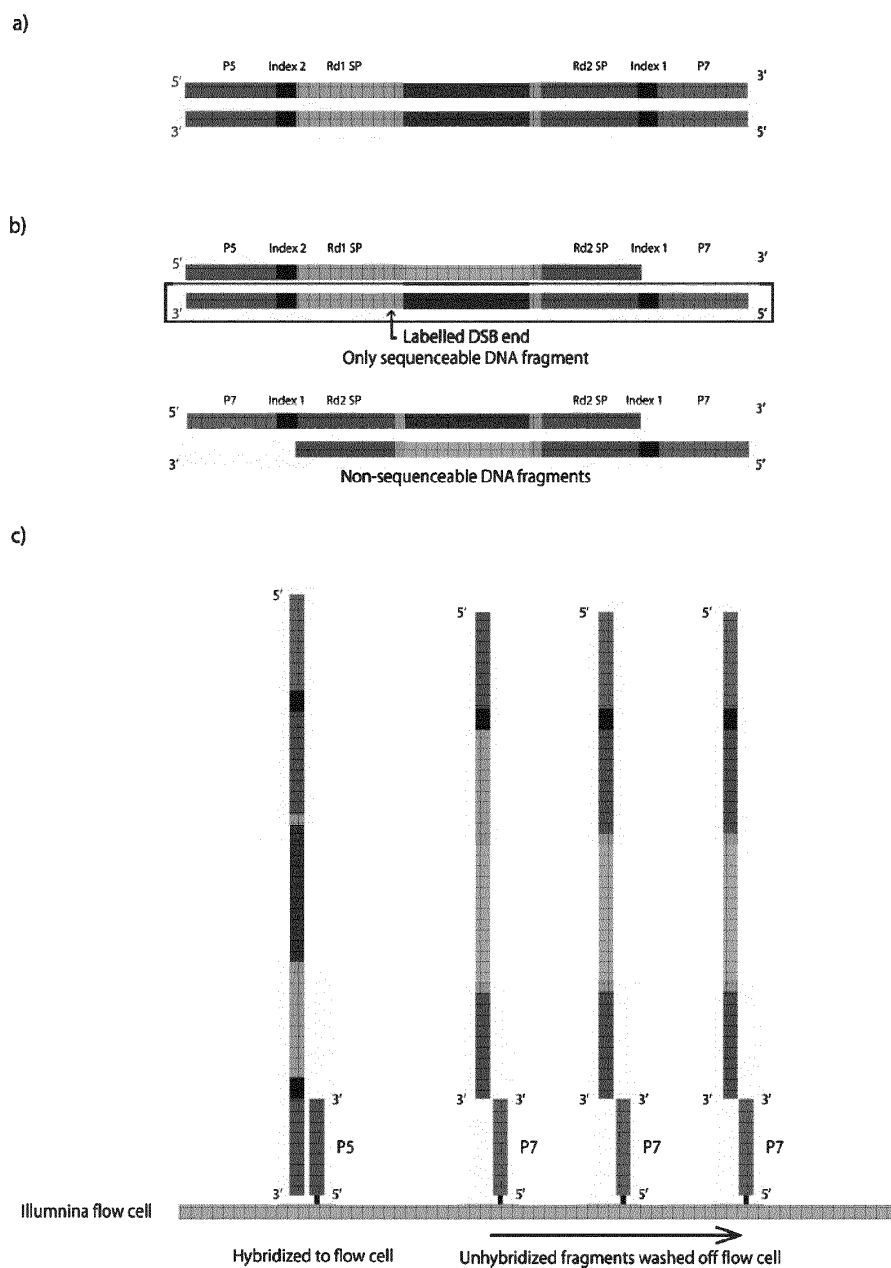
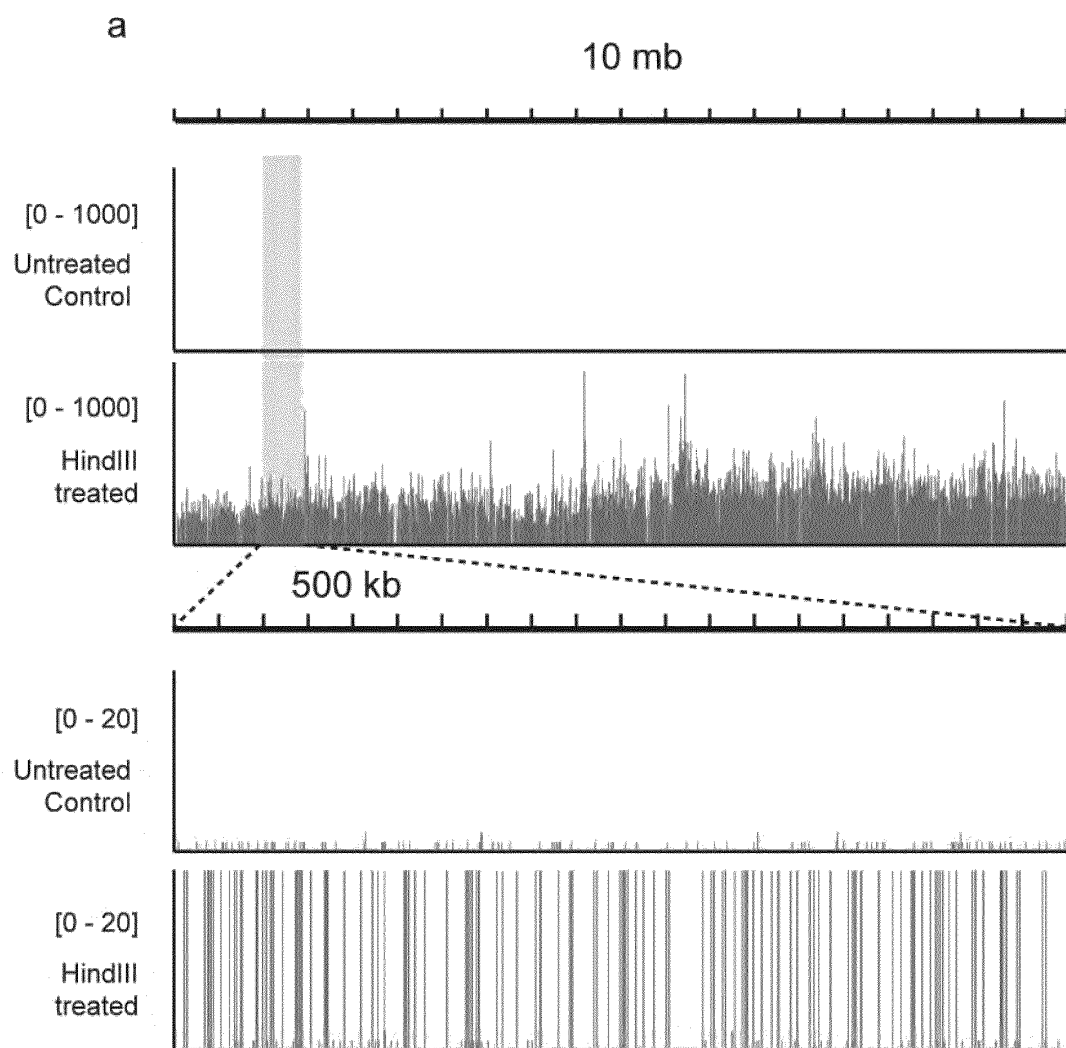


Figure 2

**Figure 3**

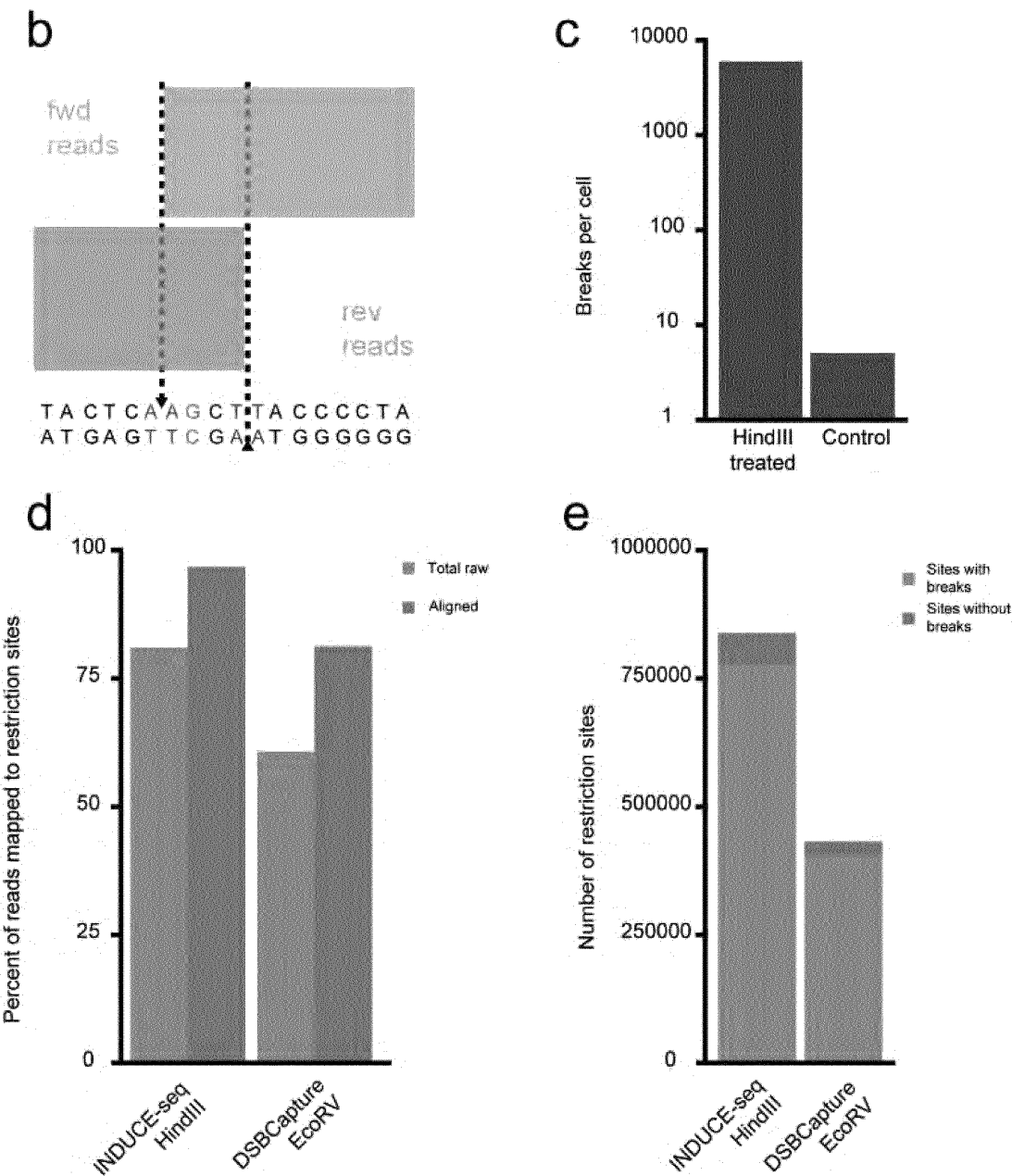
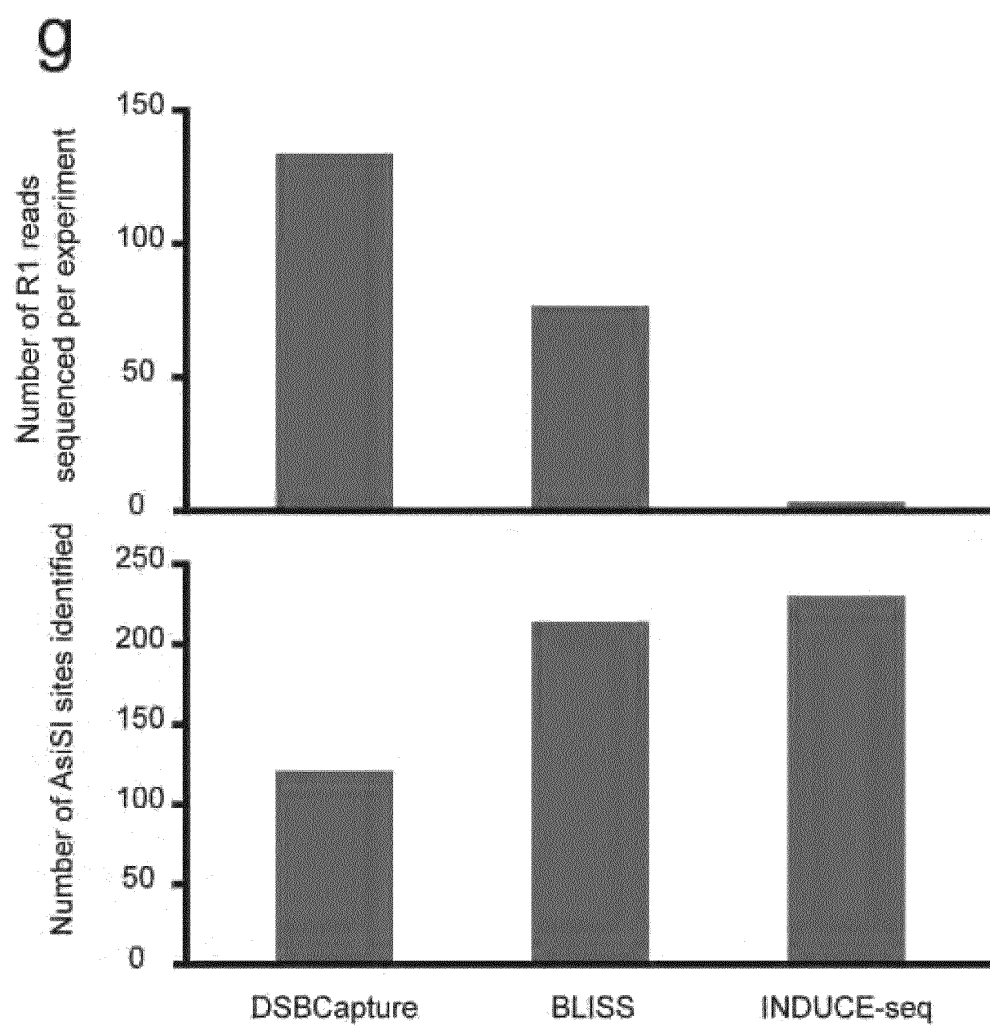


Figure 3 (cont)



**Figure 3 (cont)**

a

EMX1

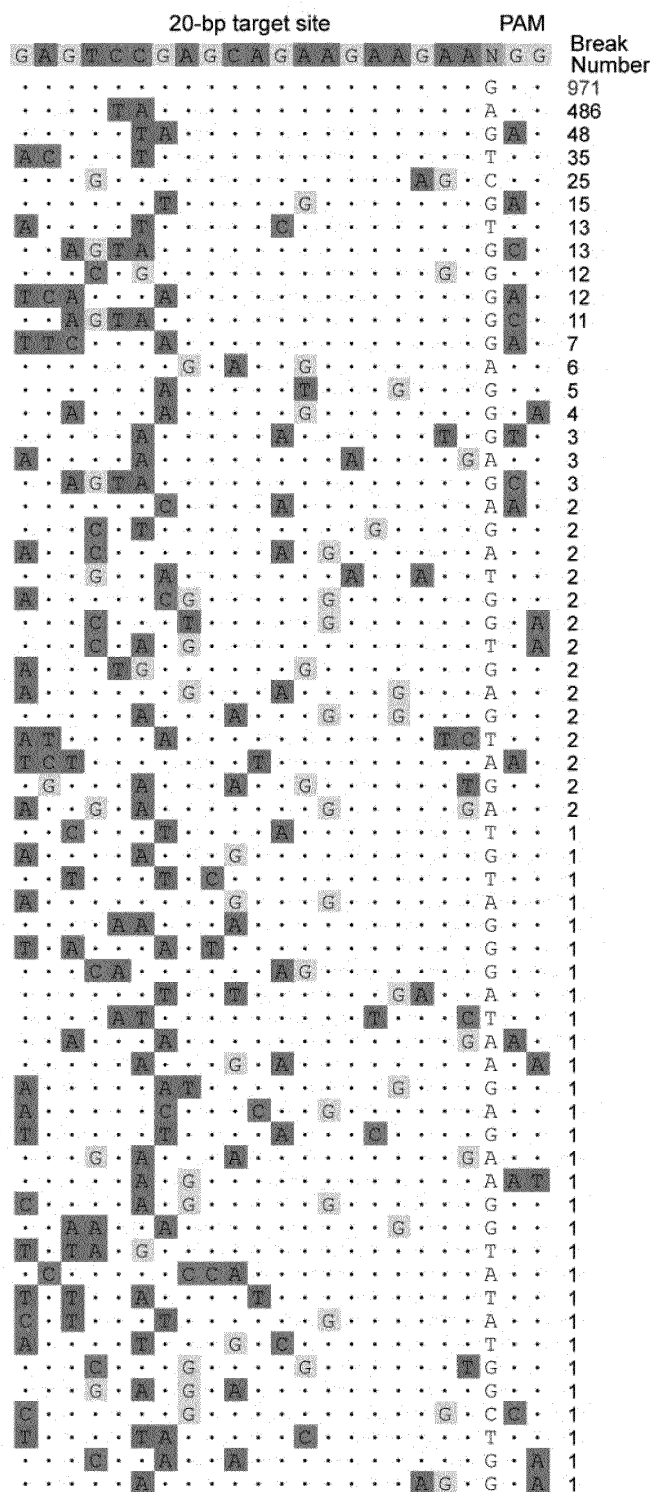
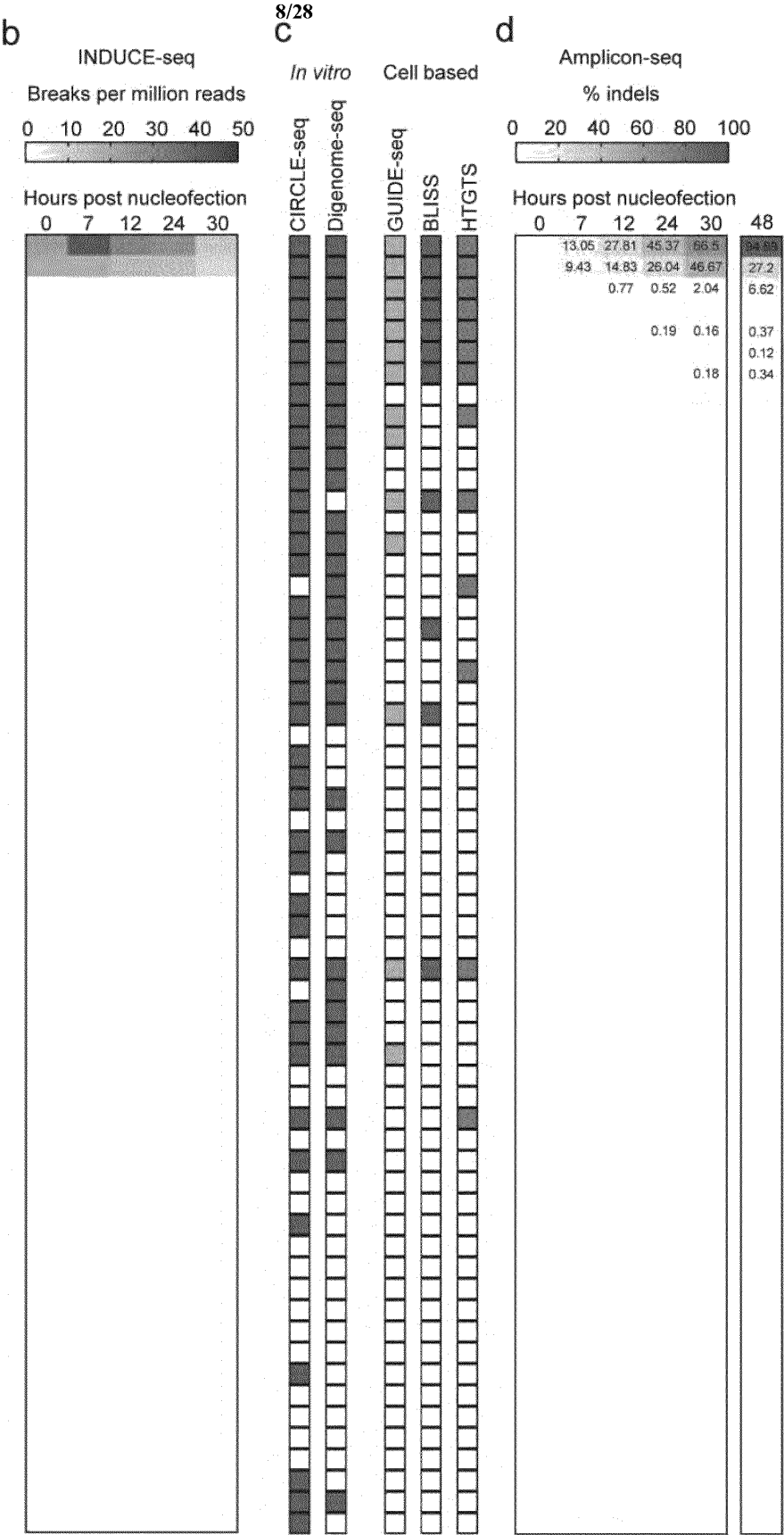


Figure 4

Figure 4
(cont)



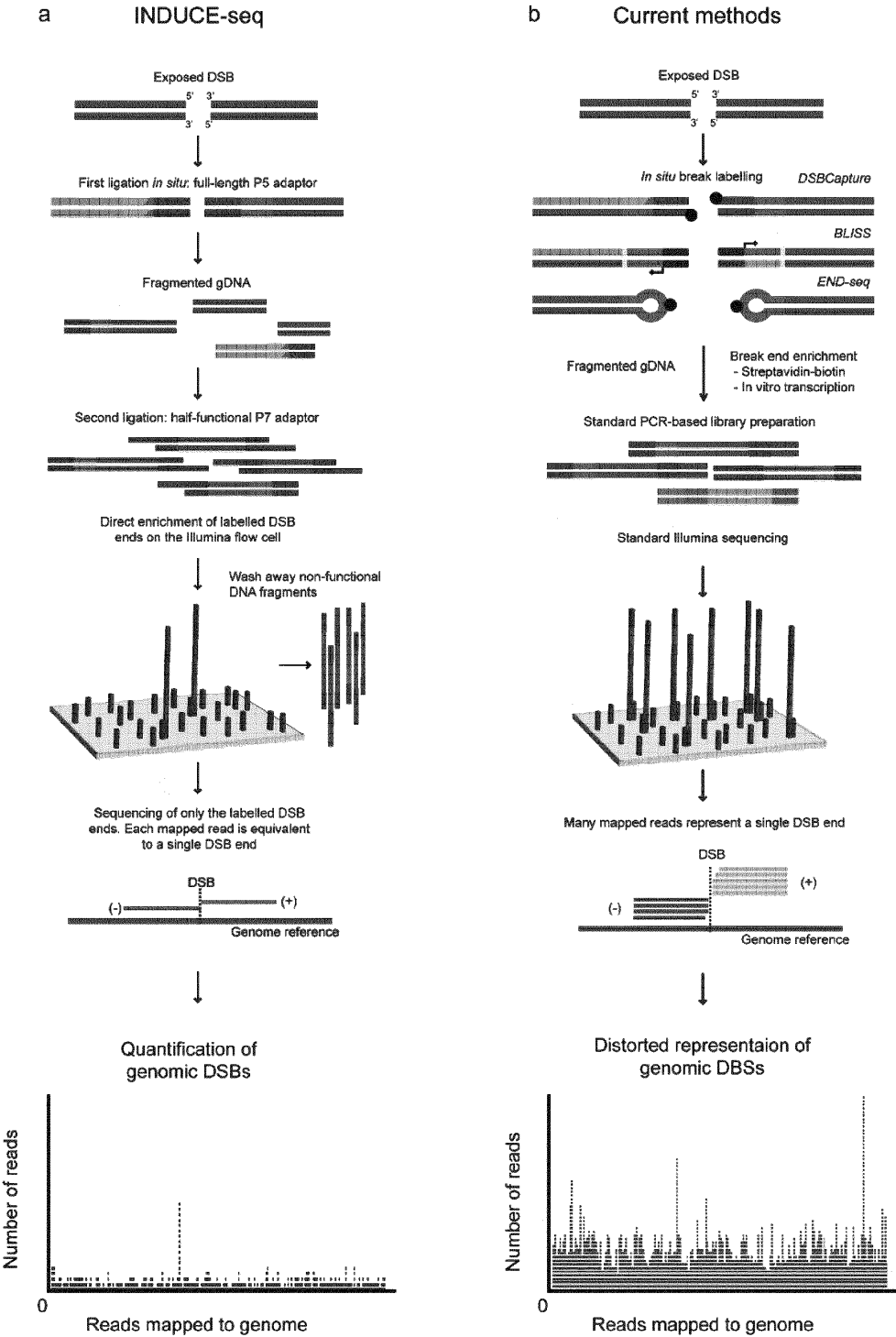


Figure 5

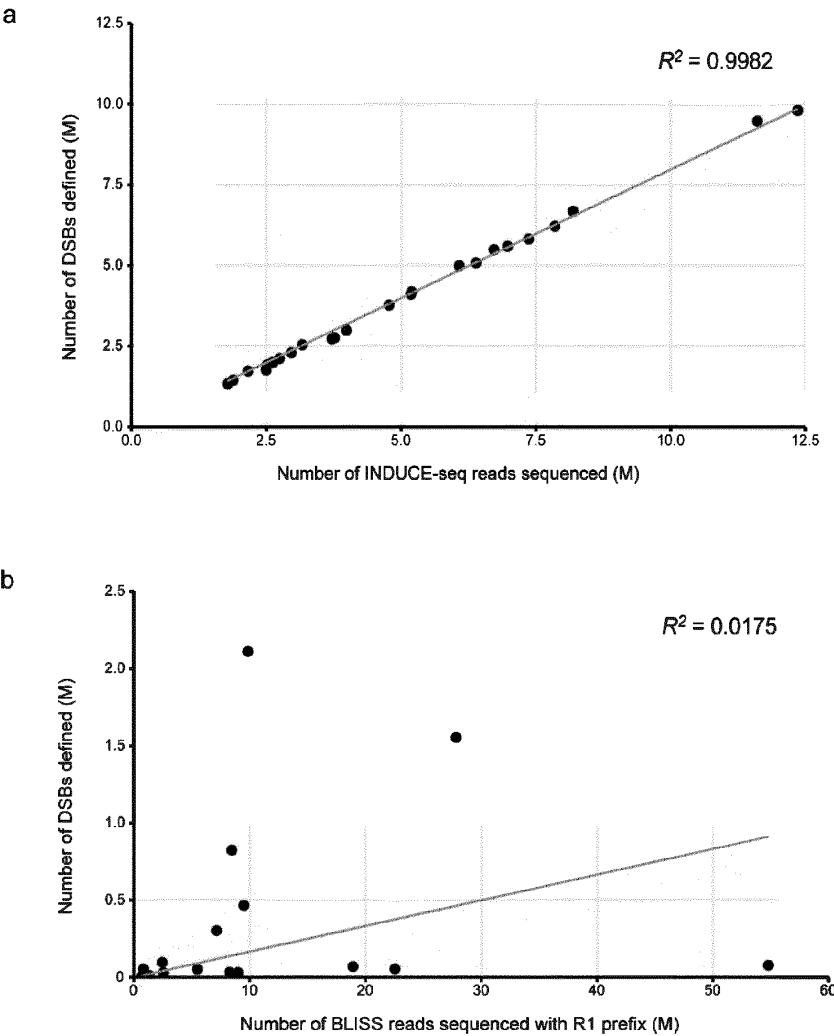


Figure 6

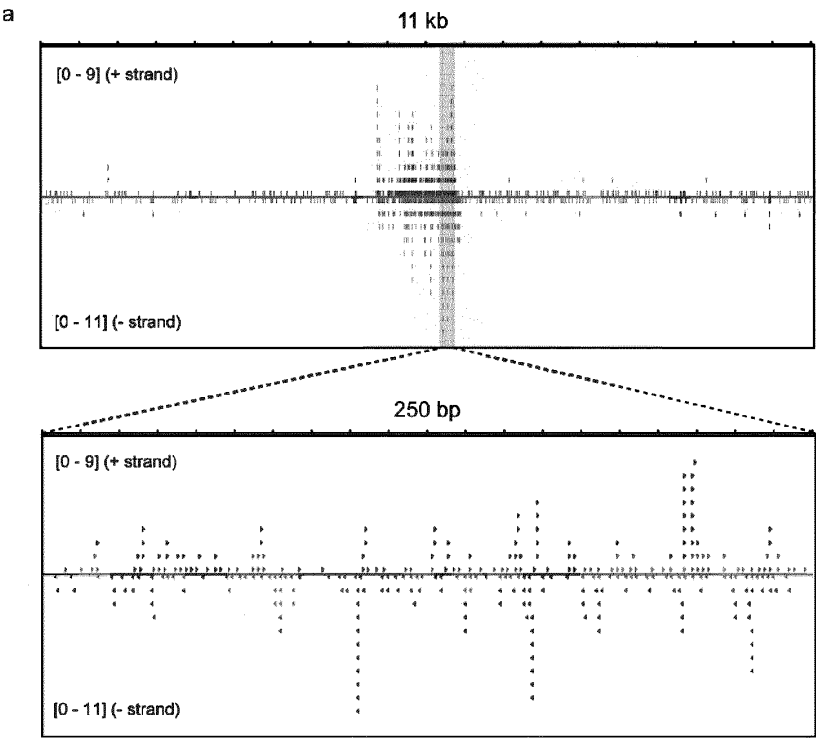


Figure 7

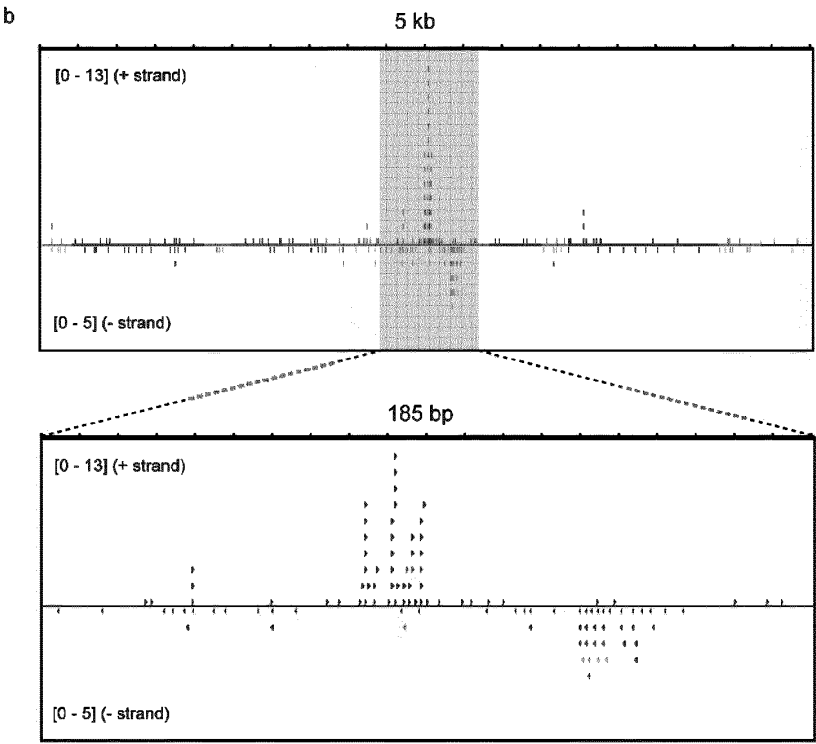


Figure 7 (CONT)

CRISPR Off-target discovery pipeline

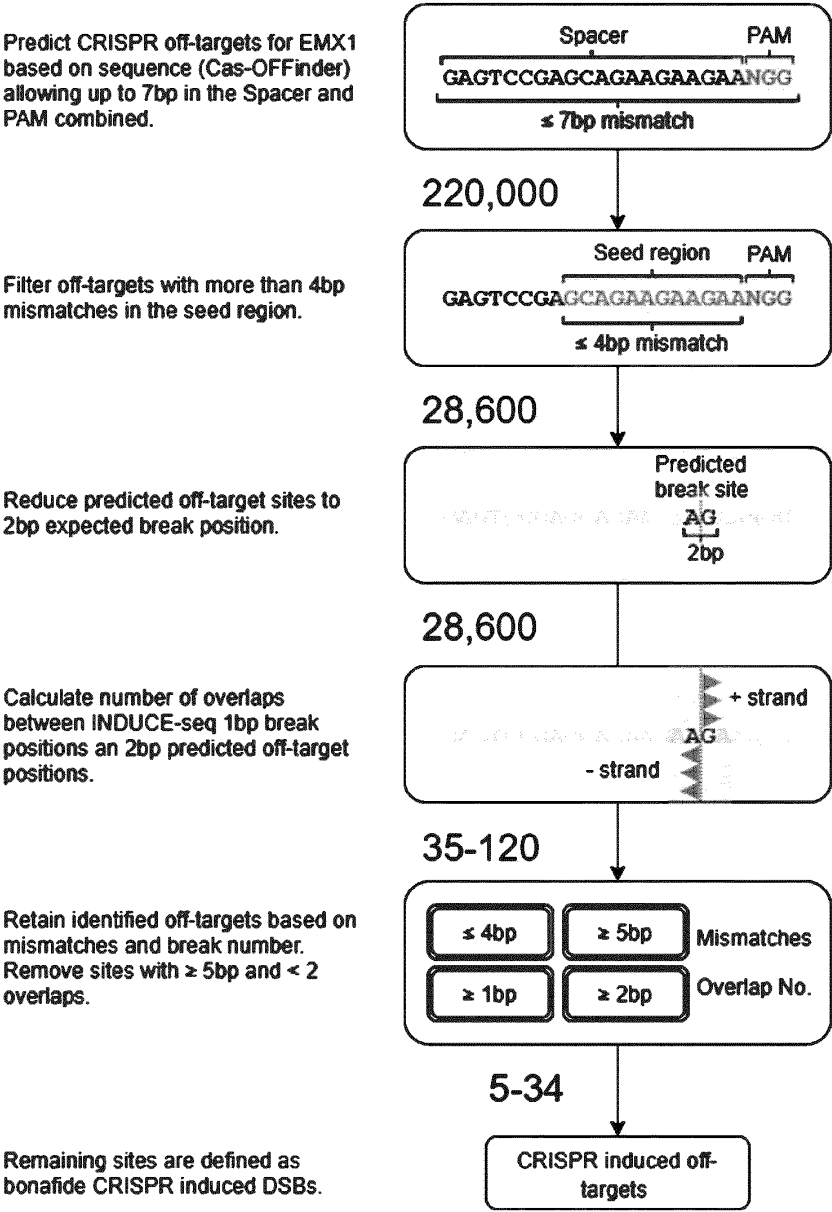


Figure 8

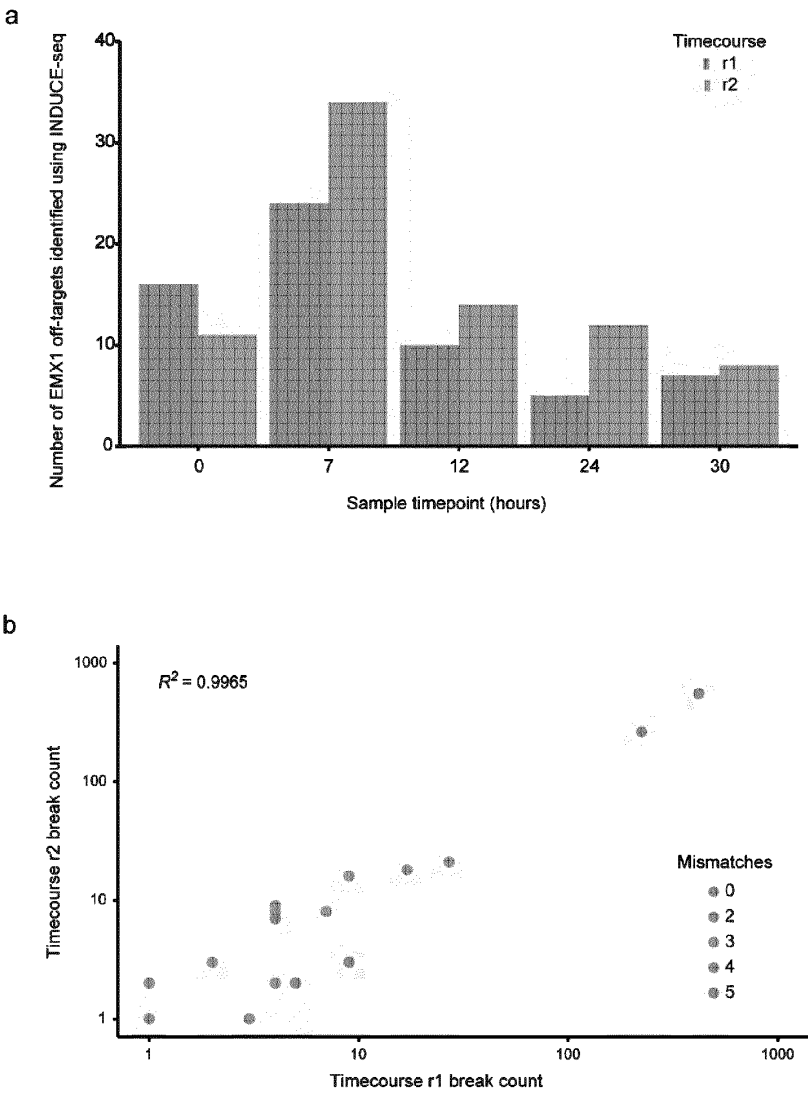
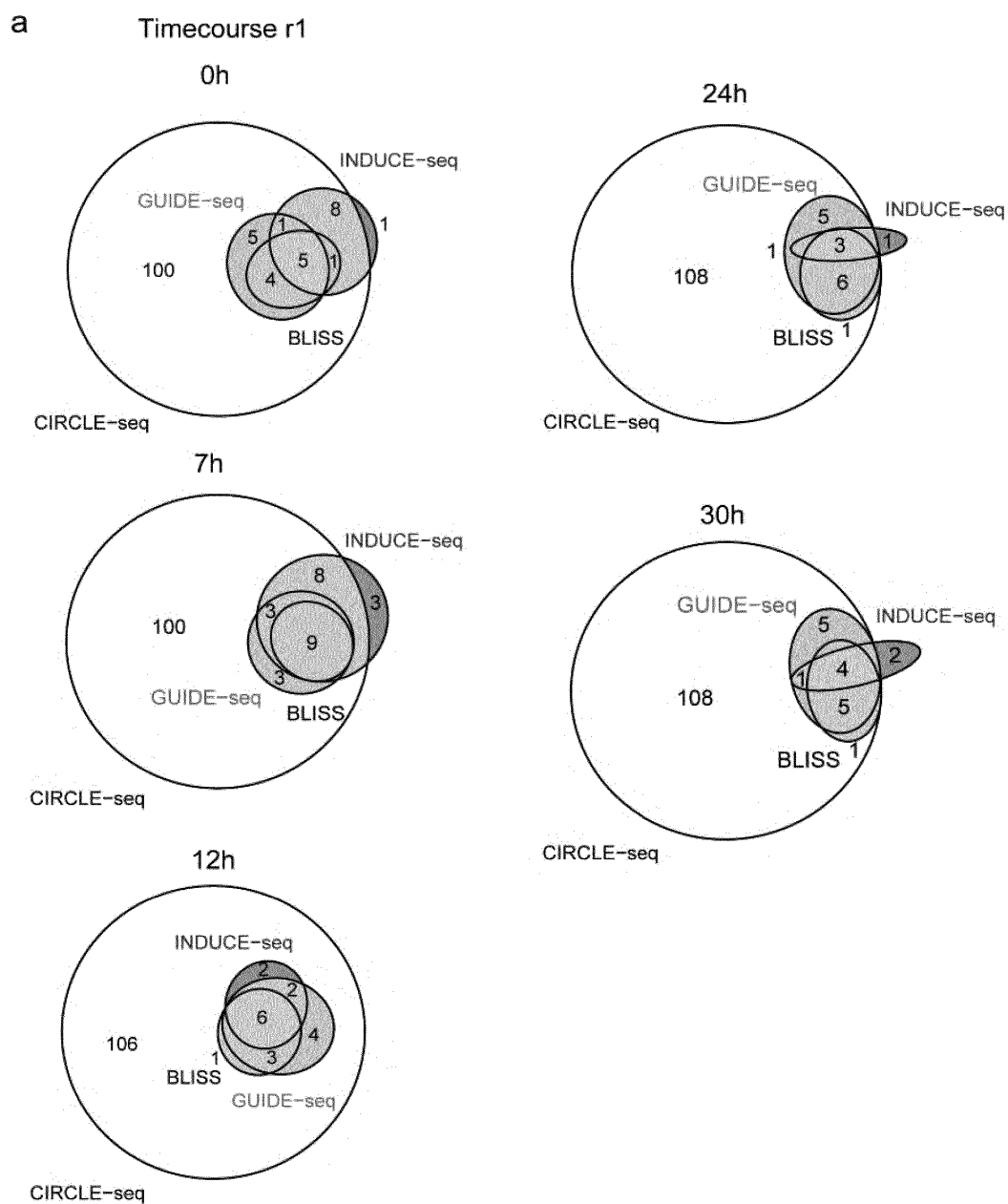
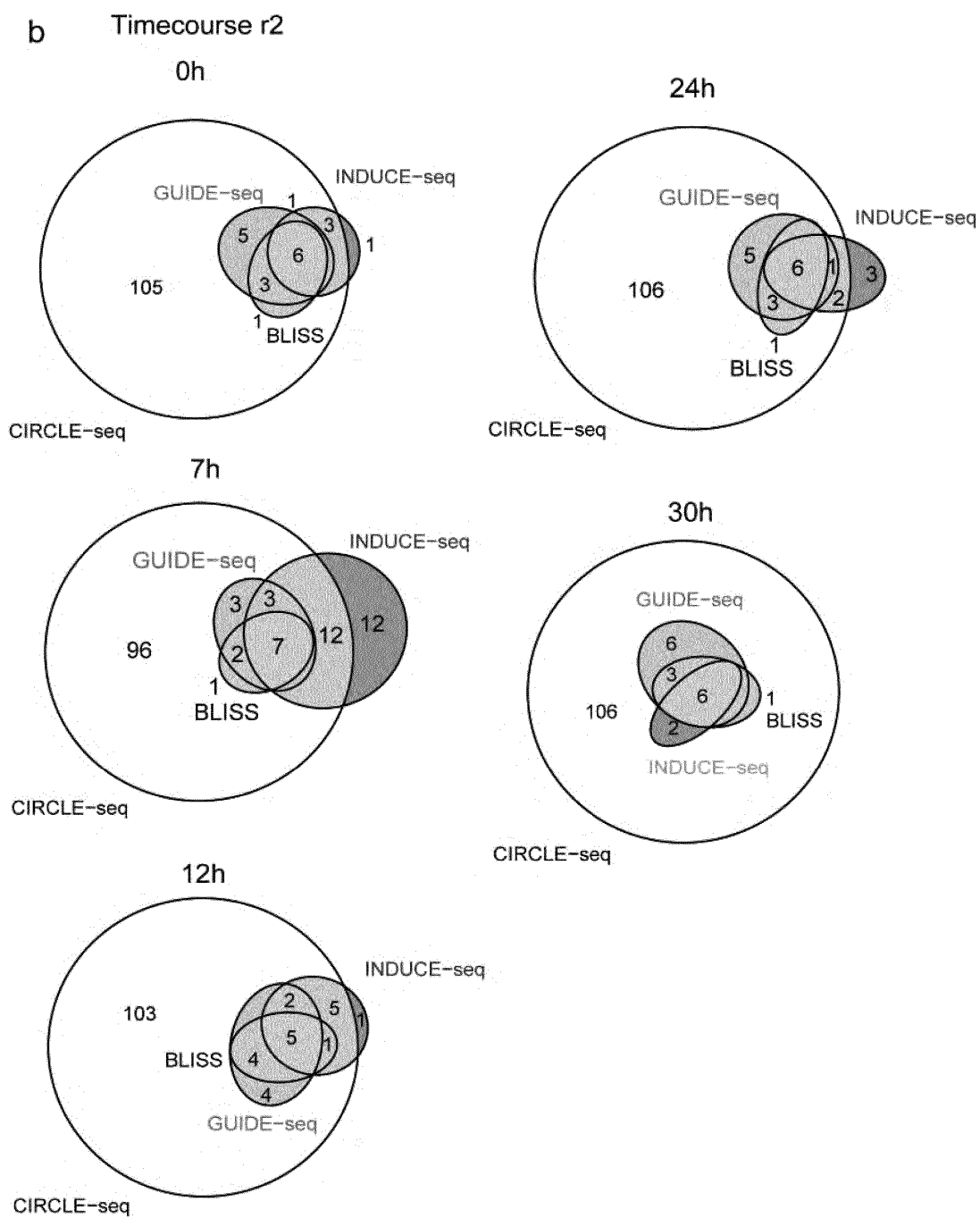
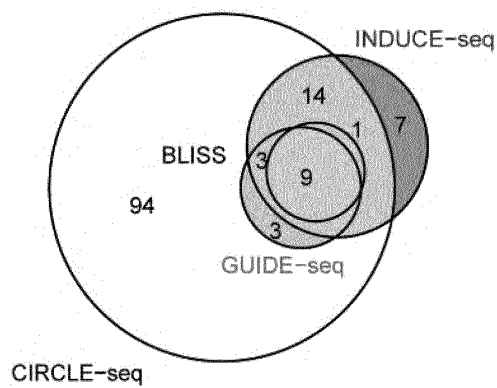


Figure 9

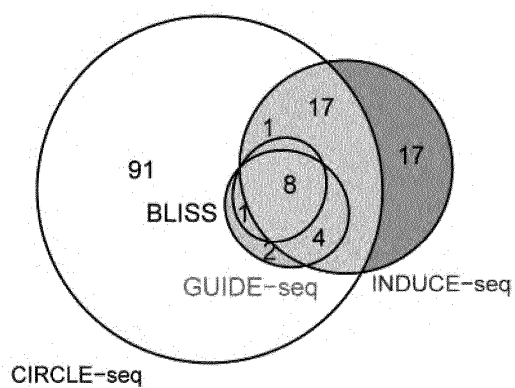
**Figure 10**

**Figure 10 (cont)**

c Timecourse r1 0h-30h



d Timecourse r2 0h-30h



e Timecourse r1&r2 0h-30h

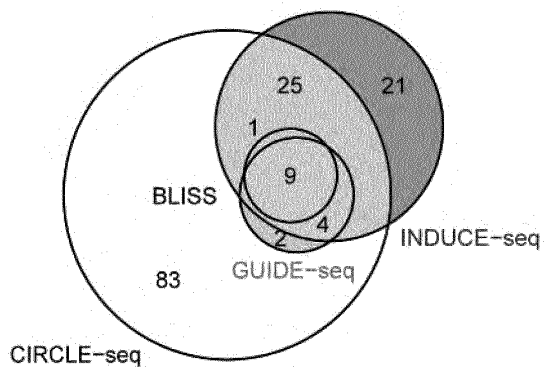


Figure 10 (cont)

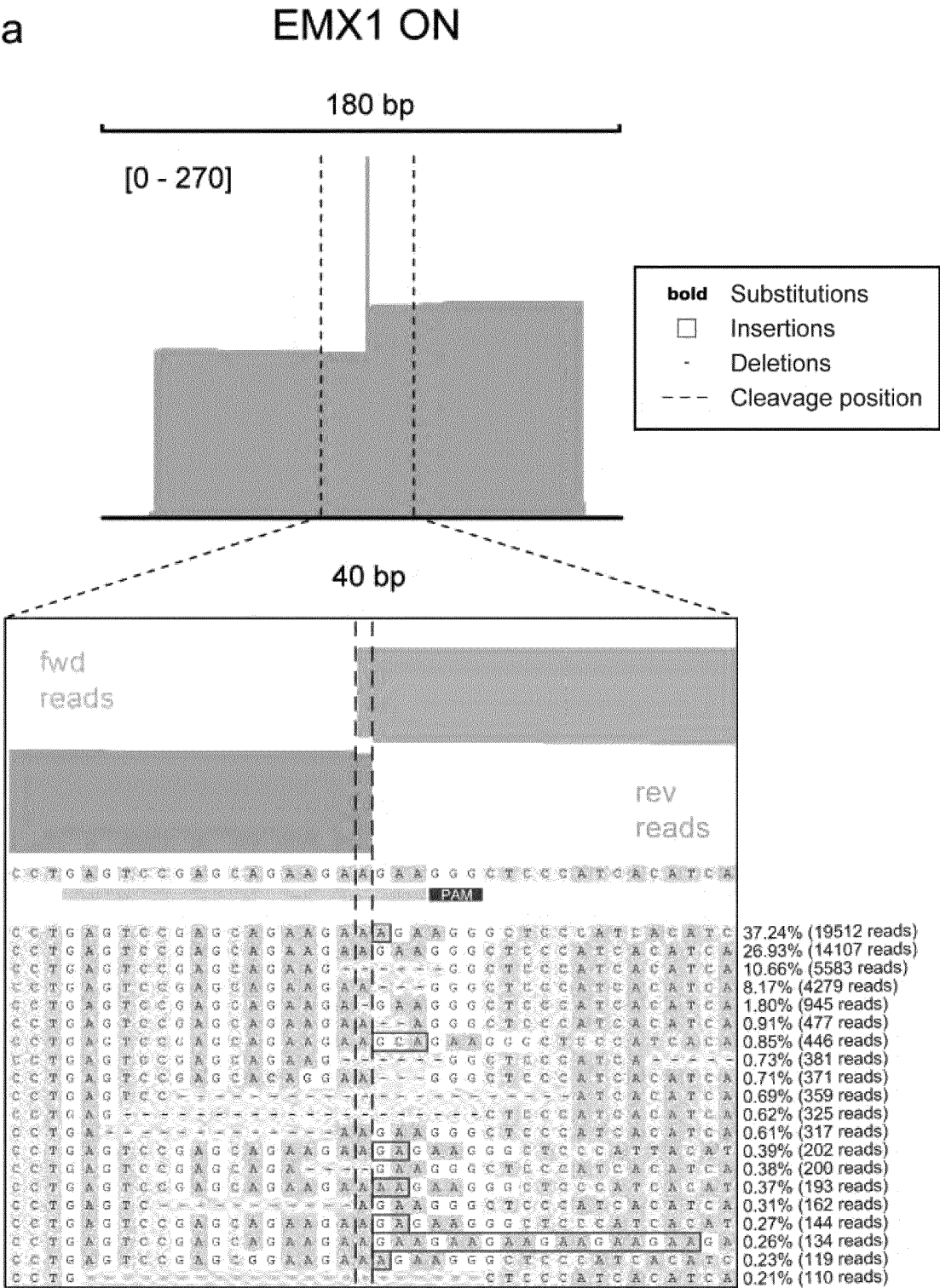


Figure 11

b

19/28
EMX1 OT-1

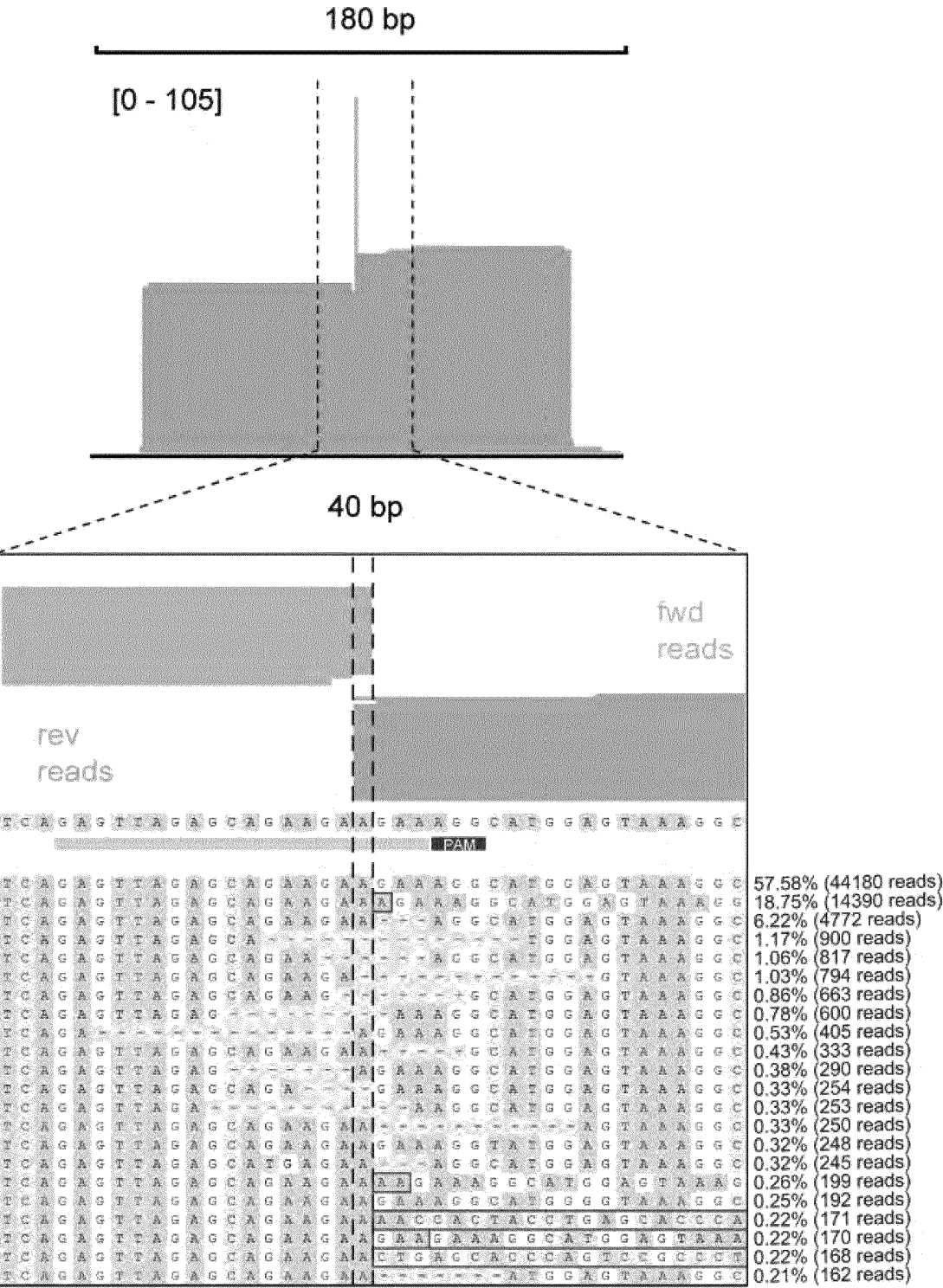


Figure 11 (cont)

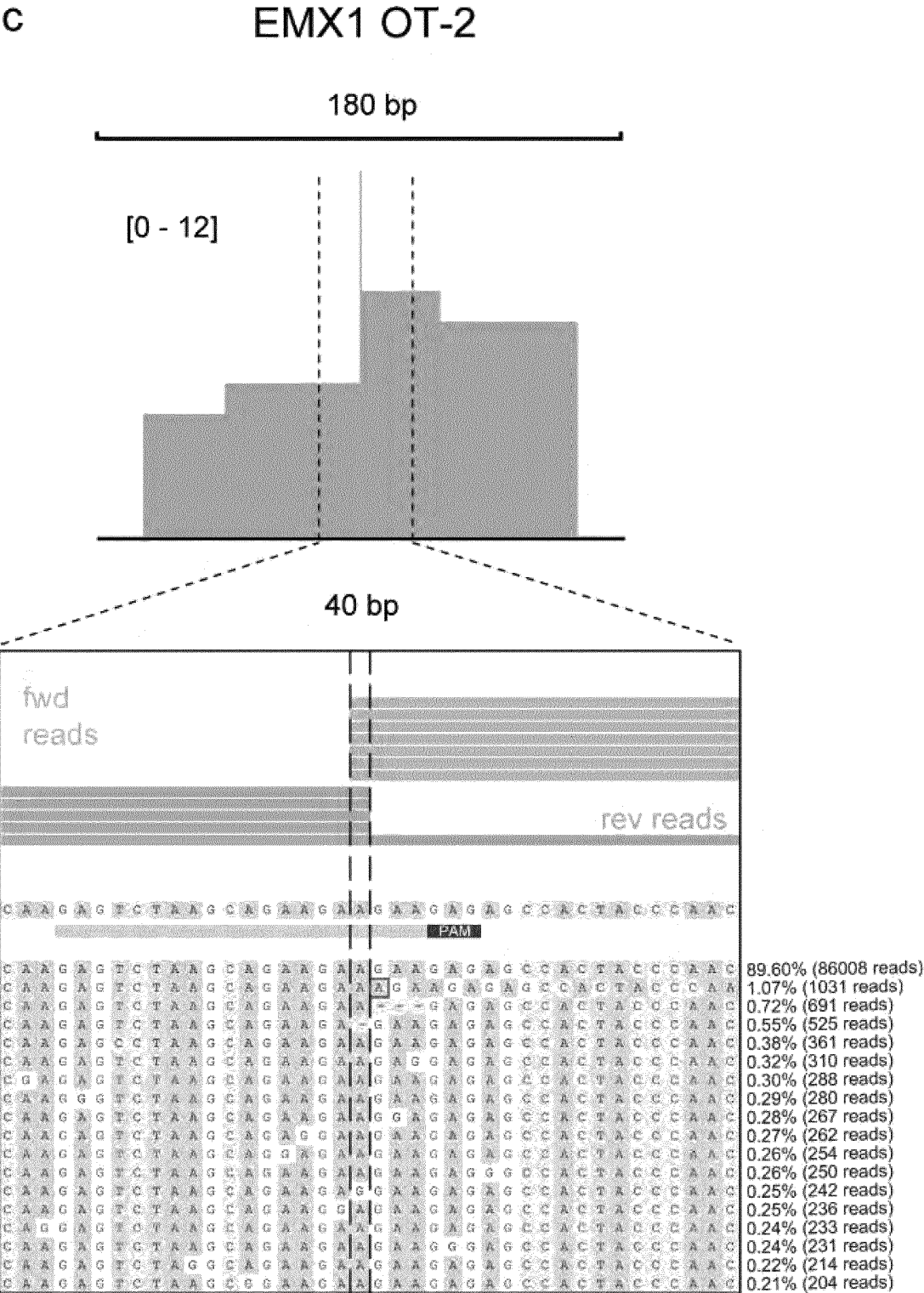


Figure 11 (cont)

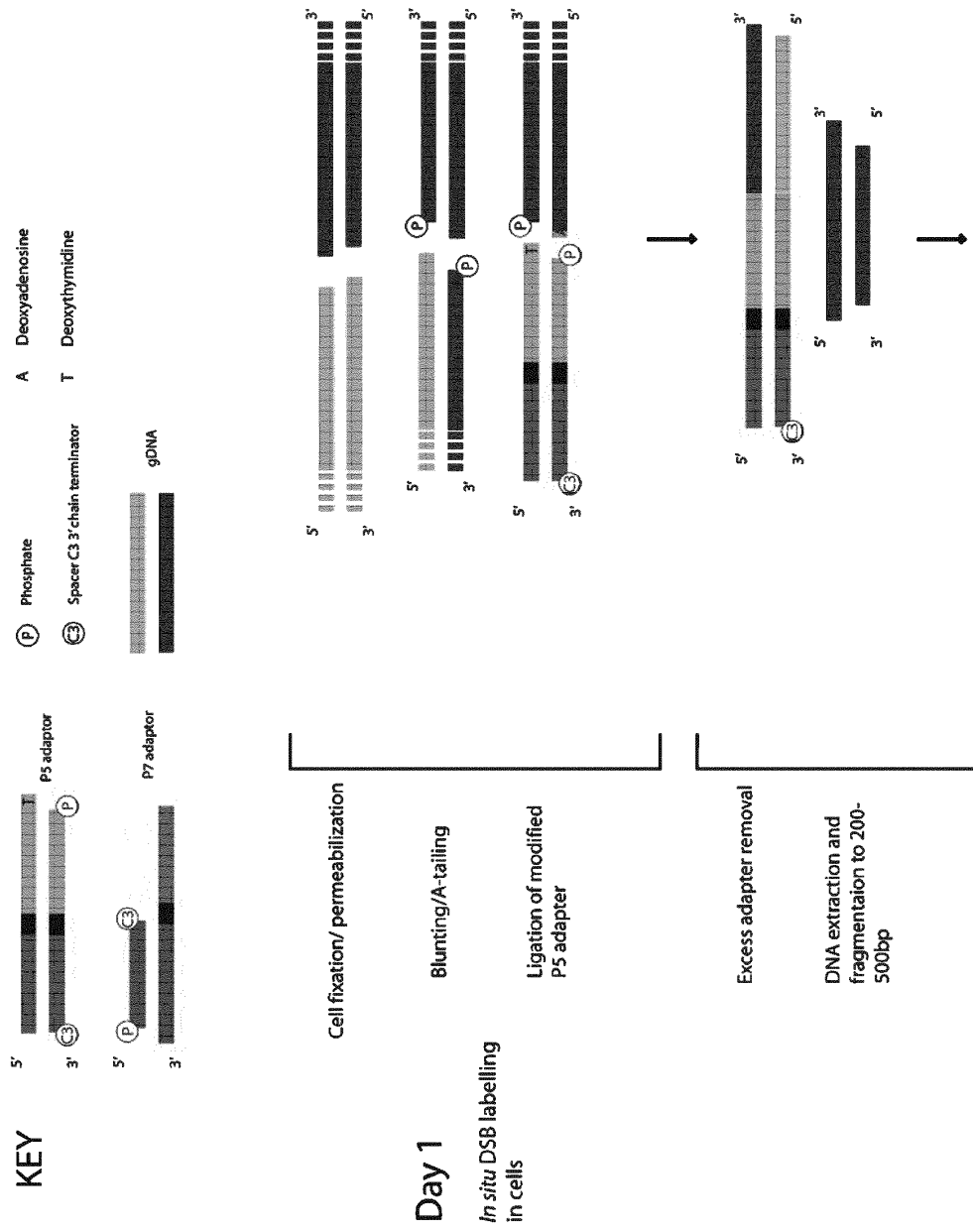


Figure 12

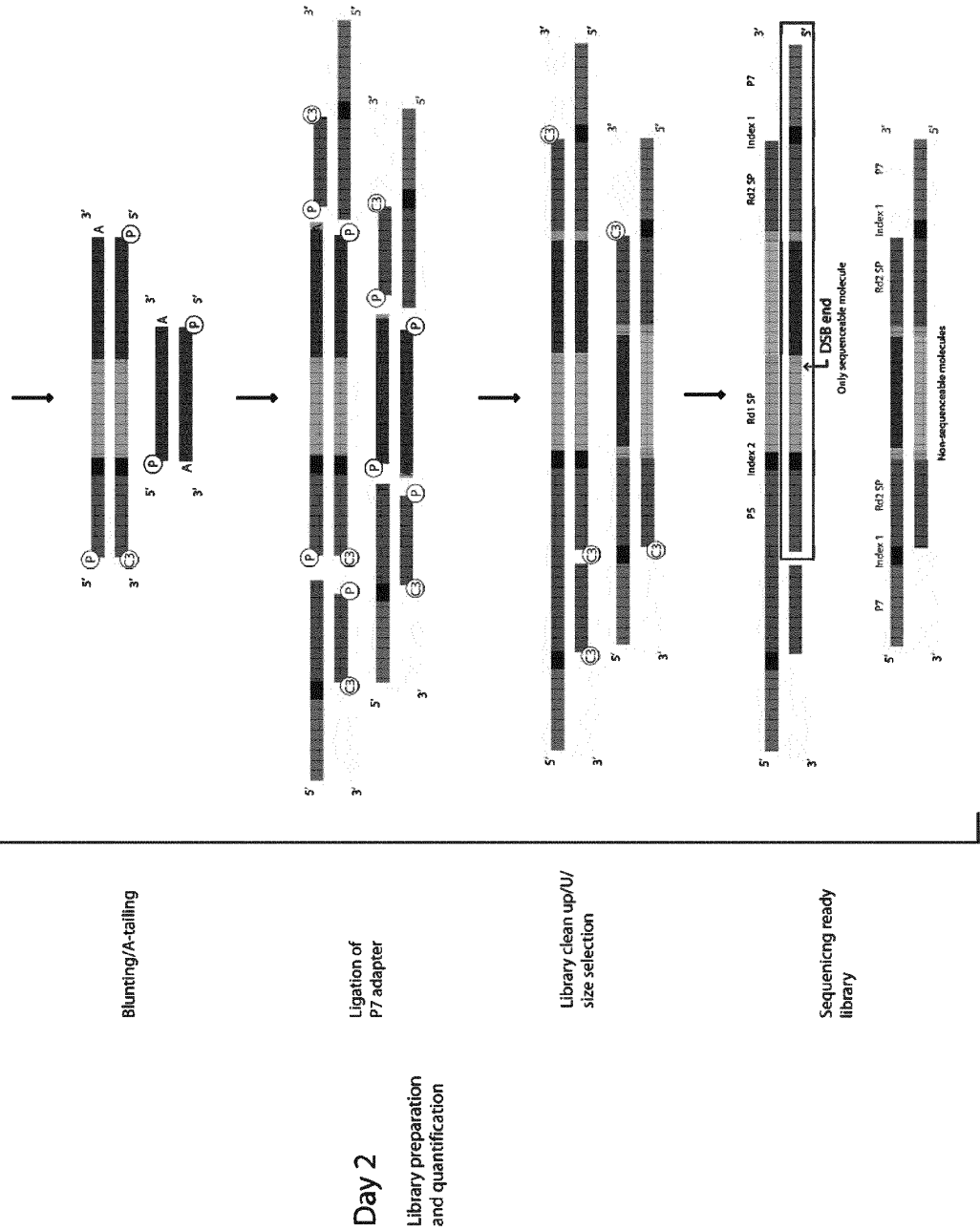
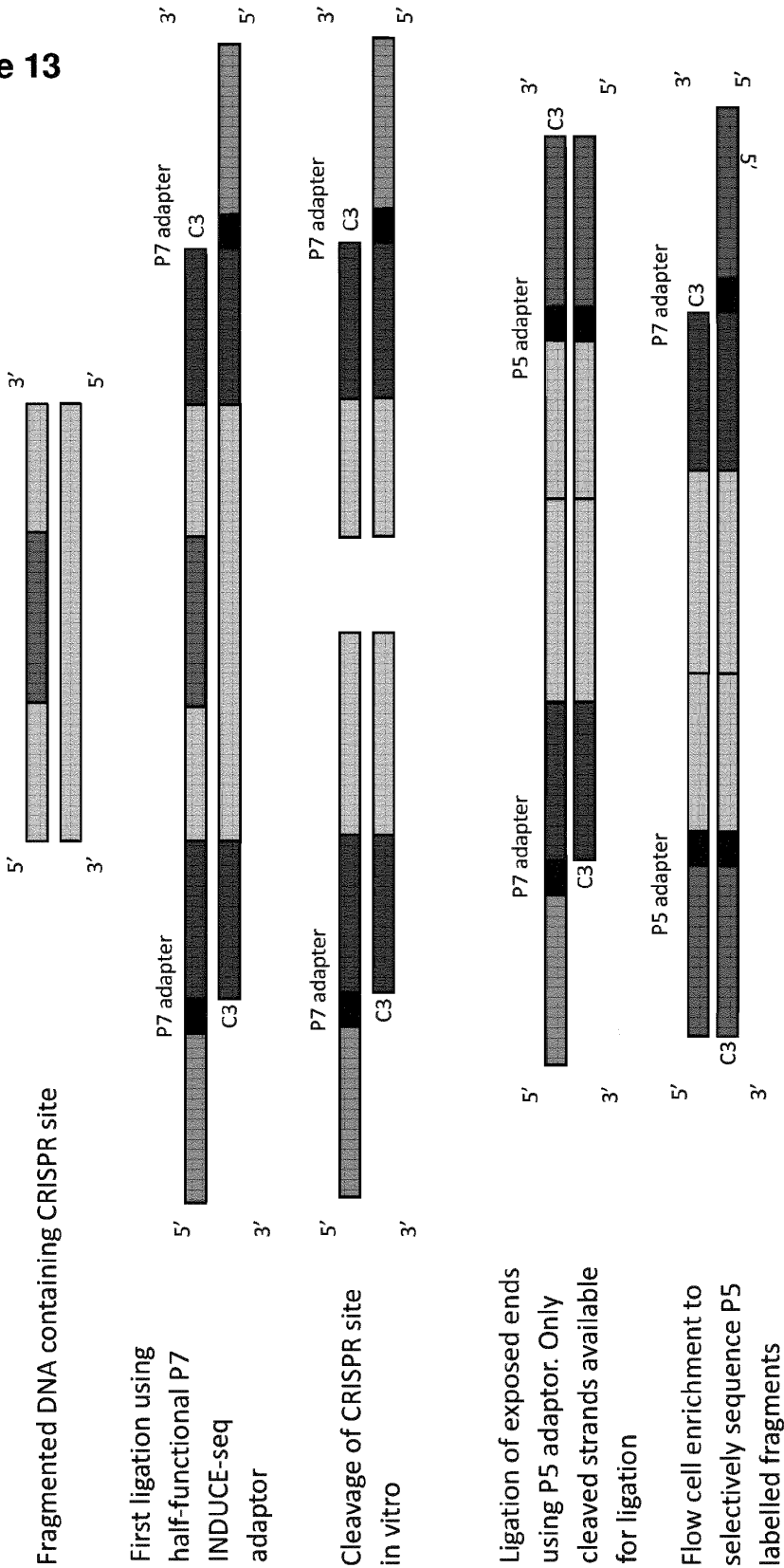


Figure 12 (cont)

Figure 13



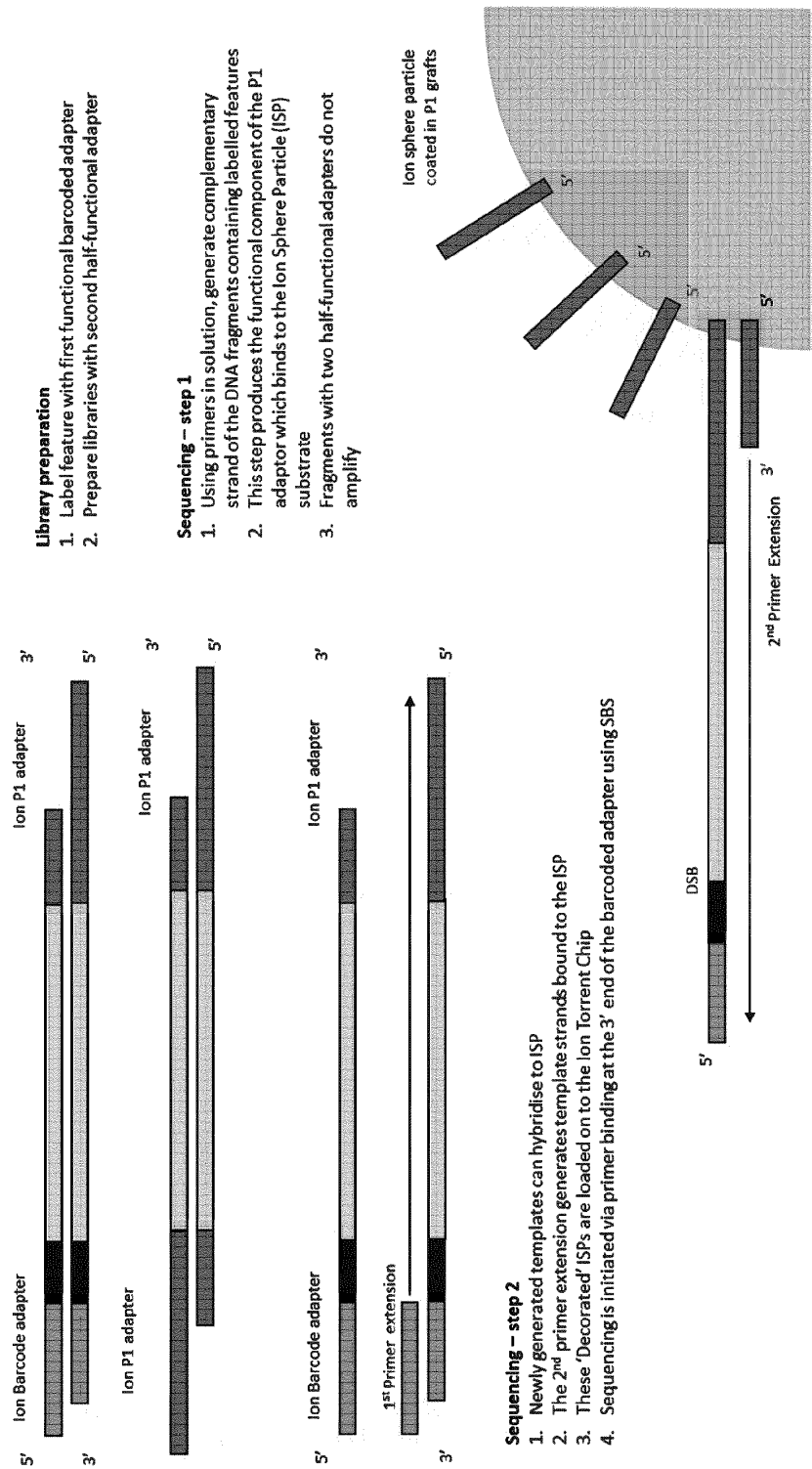


Figure 14

INDUCE-seq Torrent adapters

Ion Xpress™ Barcode 1 (5'-3' orientation for barcode in bold underlined) inc T tail			
Primer 1	CCATCTCATCCCT-G-CGTGTCCTCC (SEQ ID NO: 106)		
5'	CCATCTCATCCCT*G*CGTGCTCCGACTCAGCT TAAGGTAAC GAT* T P-NNNNNNNNNNNNNNNNNNN-A 3' (SEQ ID NO: 107)		
3'	/3SpC3/GGTAGAGTAGGA*C*GCACAGAGGCTGAGTCGAT TCCATTGCTA - P A-NNNNNNNNNNNNNNNNNNN- P 5' (SEQ ID NO: 108)		
Primer 2			^ DSB position
Same as ISP graft			
Half-functional Ion P1 Adapter (inc T tail)			
		Missing sequence	
	P-ATCACCAGACTGCCCATAGAGA/3SpC3/		3' (SEQ ID NO: 109)
	T*TAGTGGCTGACGGGTATCTCTCCCTTCGCCCTCCGCATCACCCAA		5' (SEQ ID NO: 110)
		CCTTTCGCCCTCCGCATCACCCAA	(SEQ ID NO: 111)

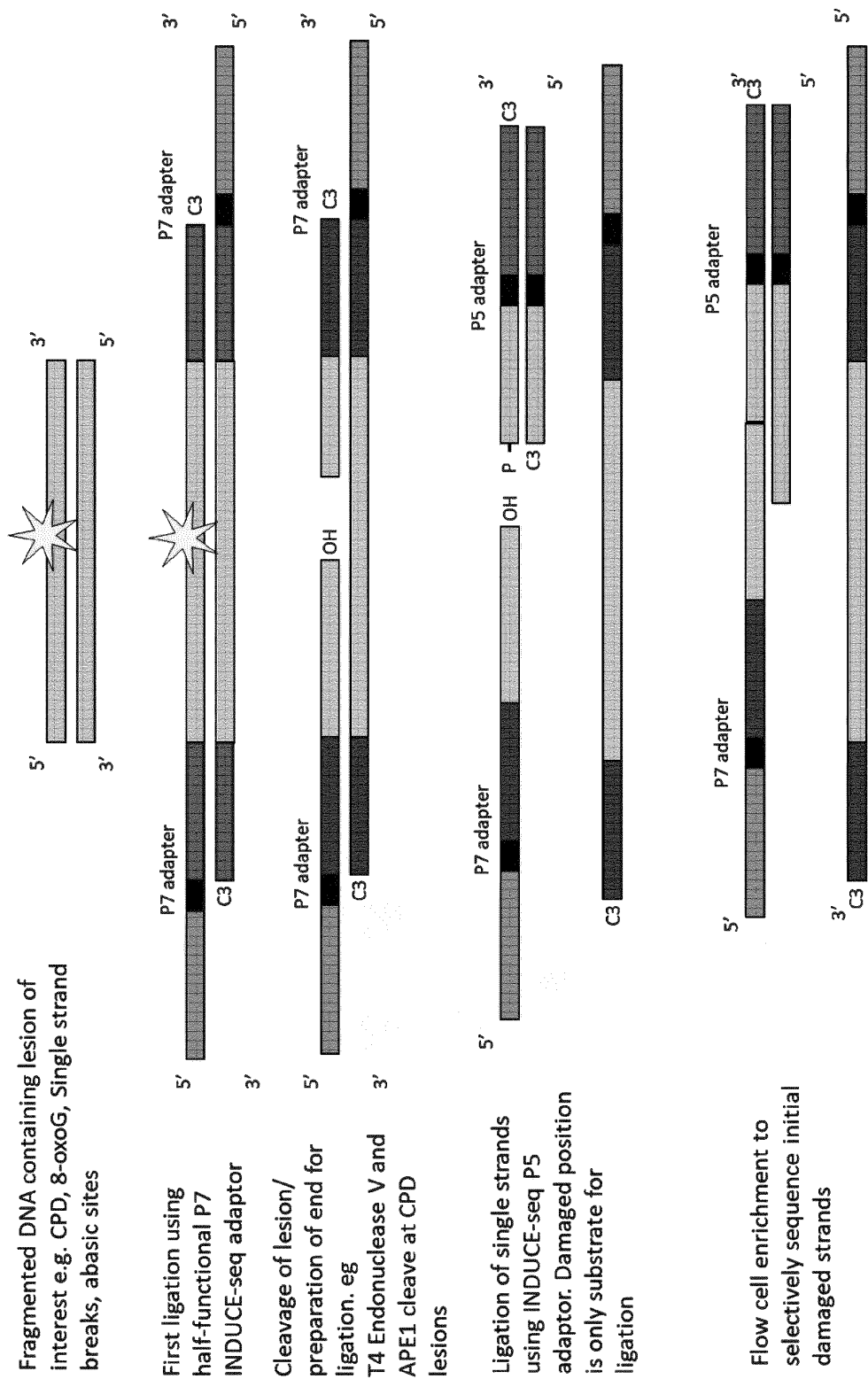


Figure 16

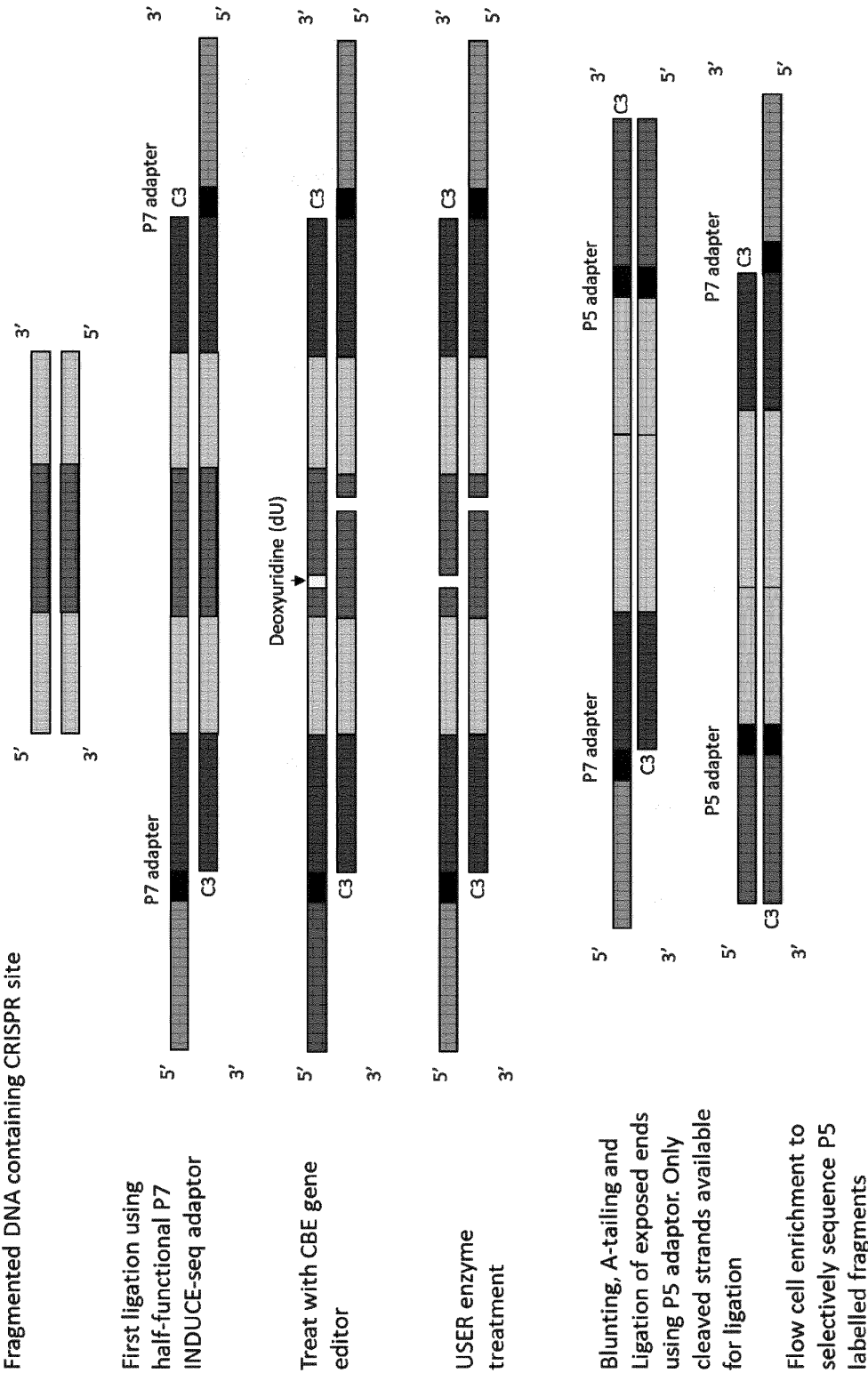


Figure 17

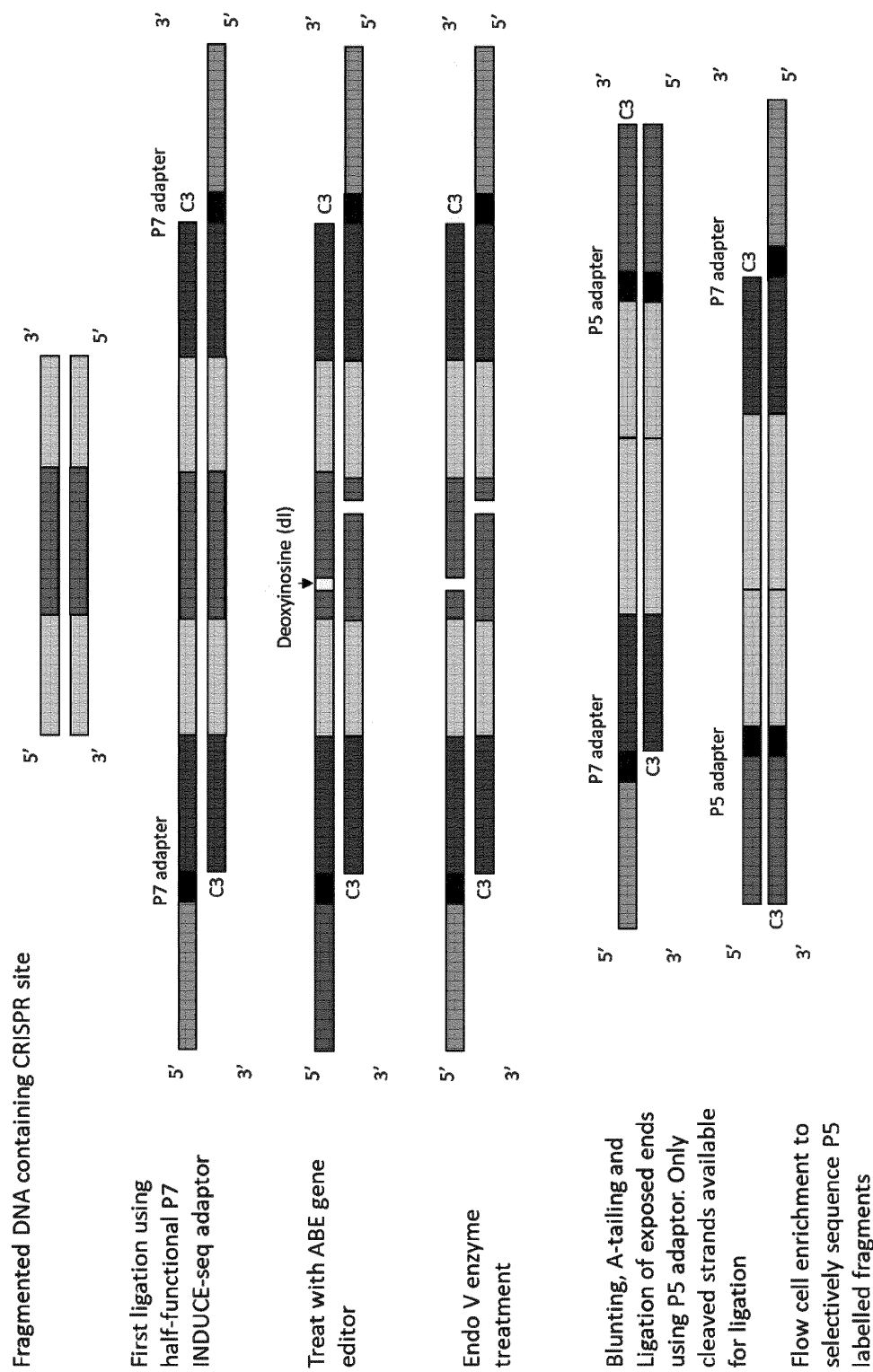


Figure 18