

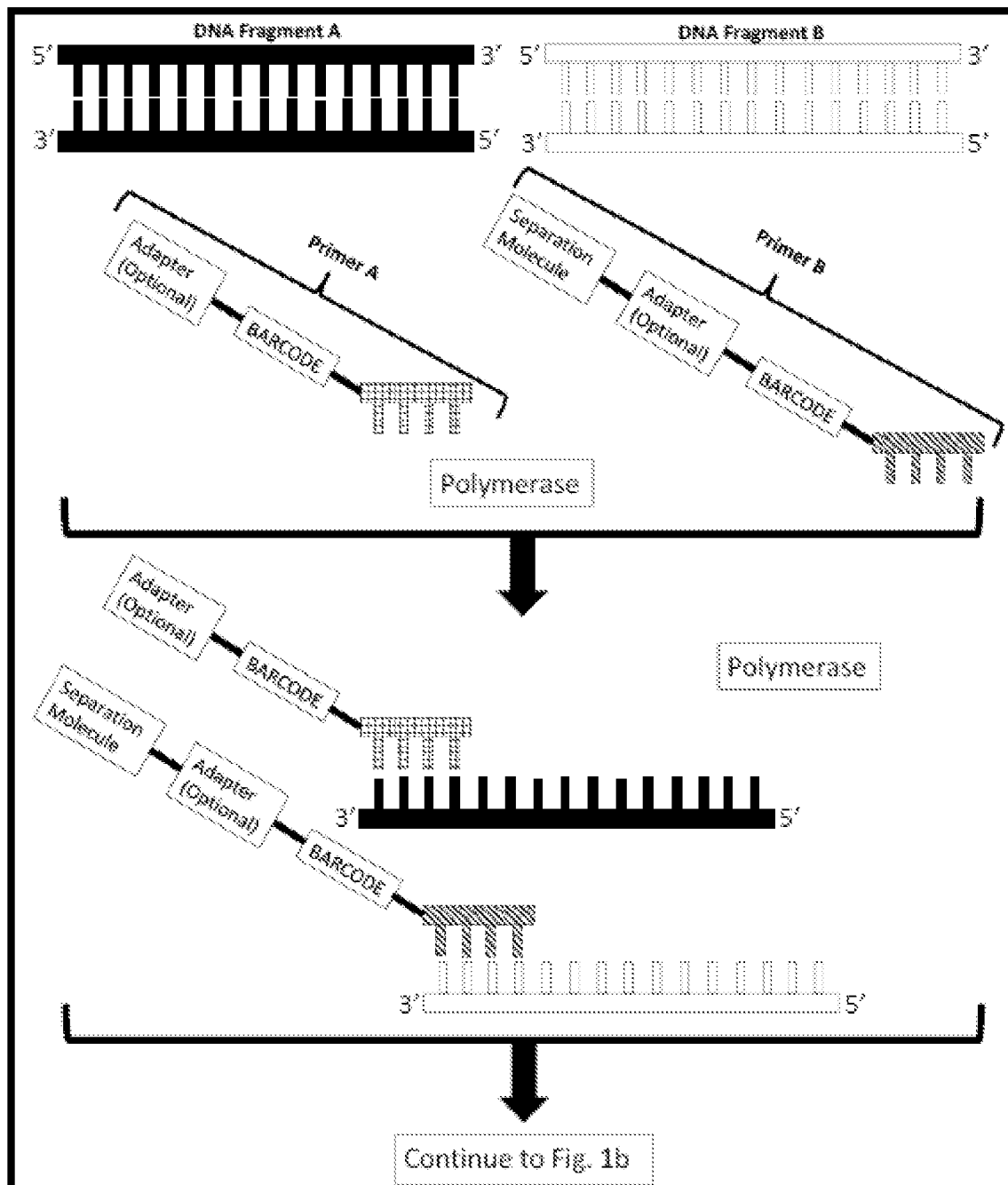
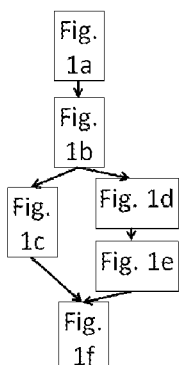
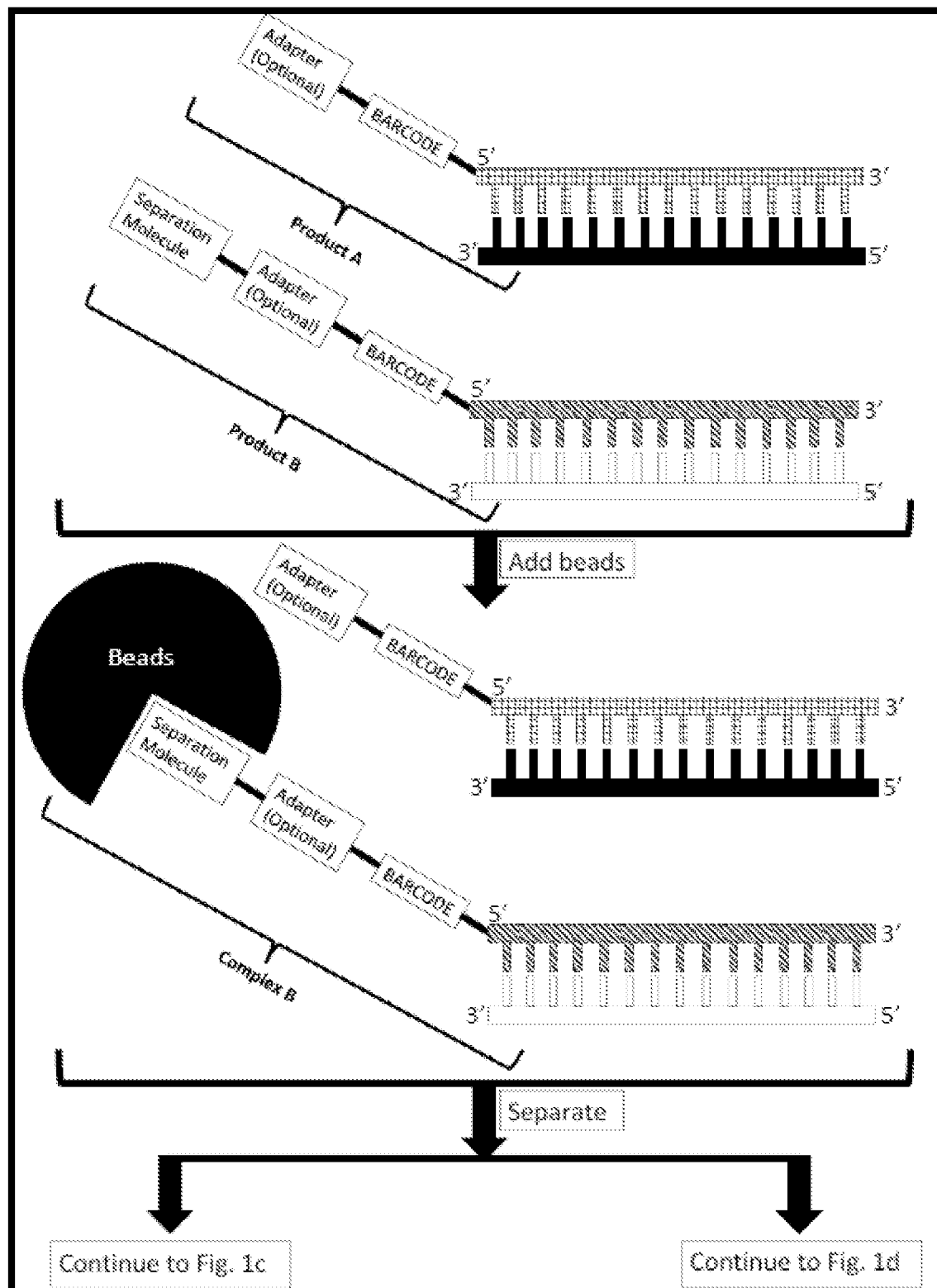
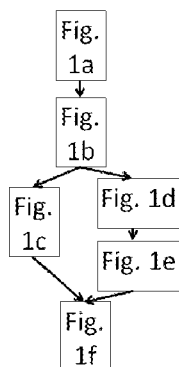


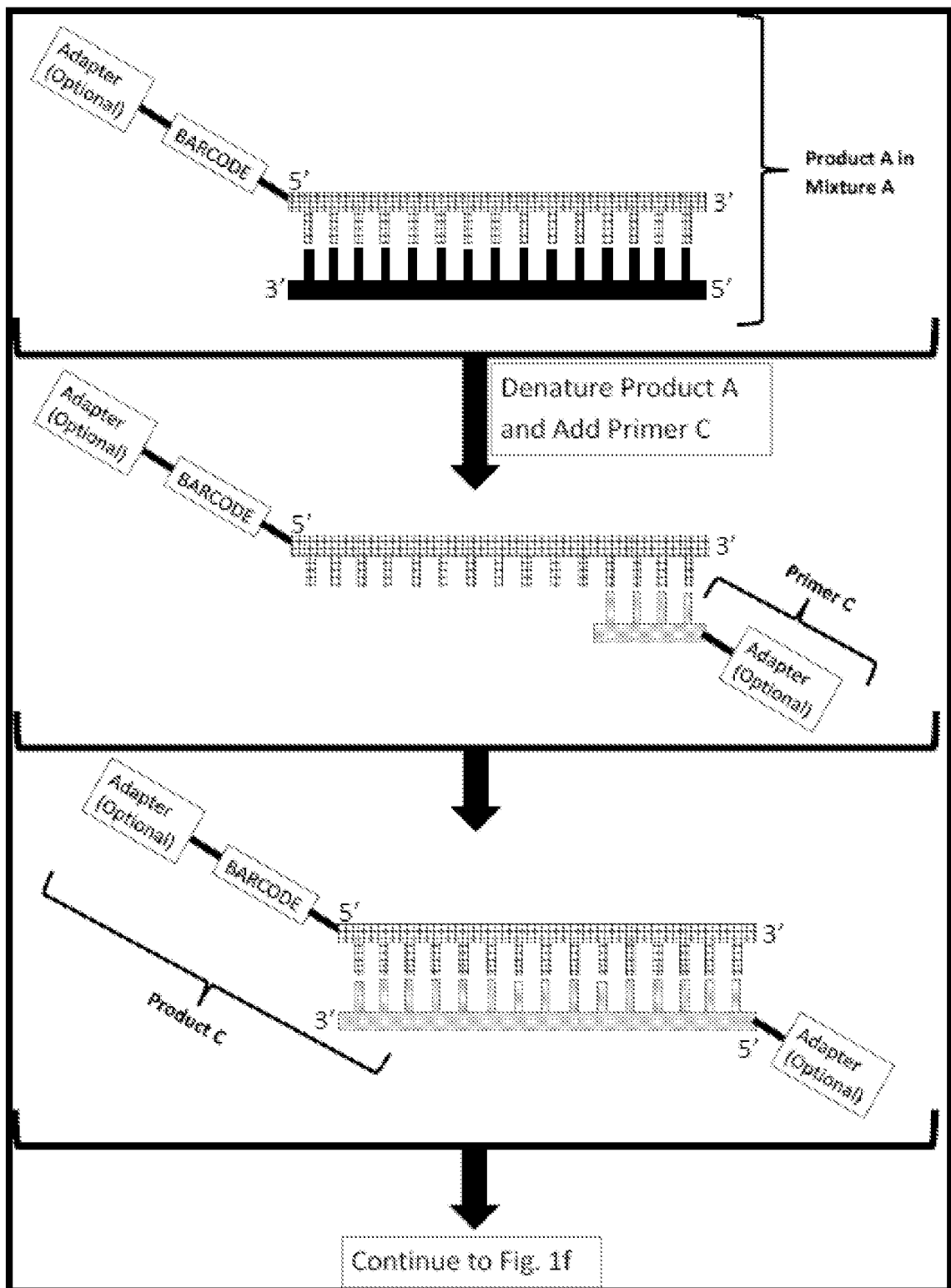
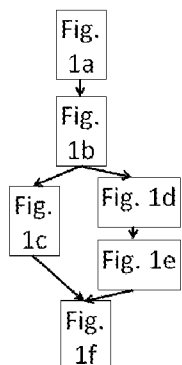
Figure 1a



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**Figure 1b**

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**Figure 1c**

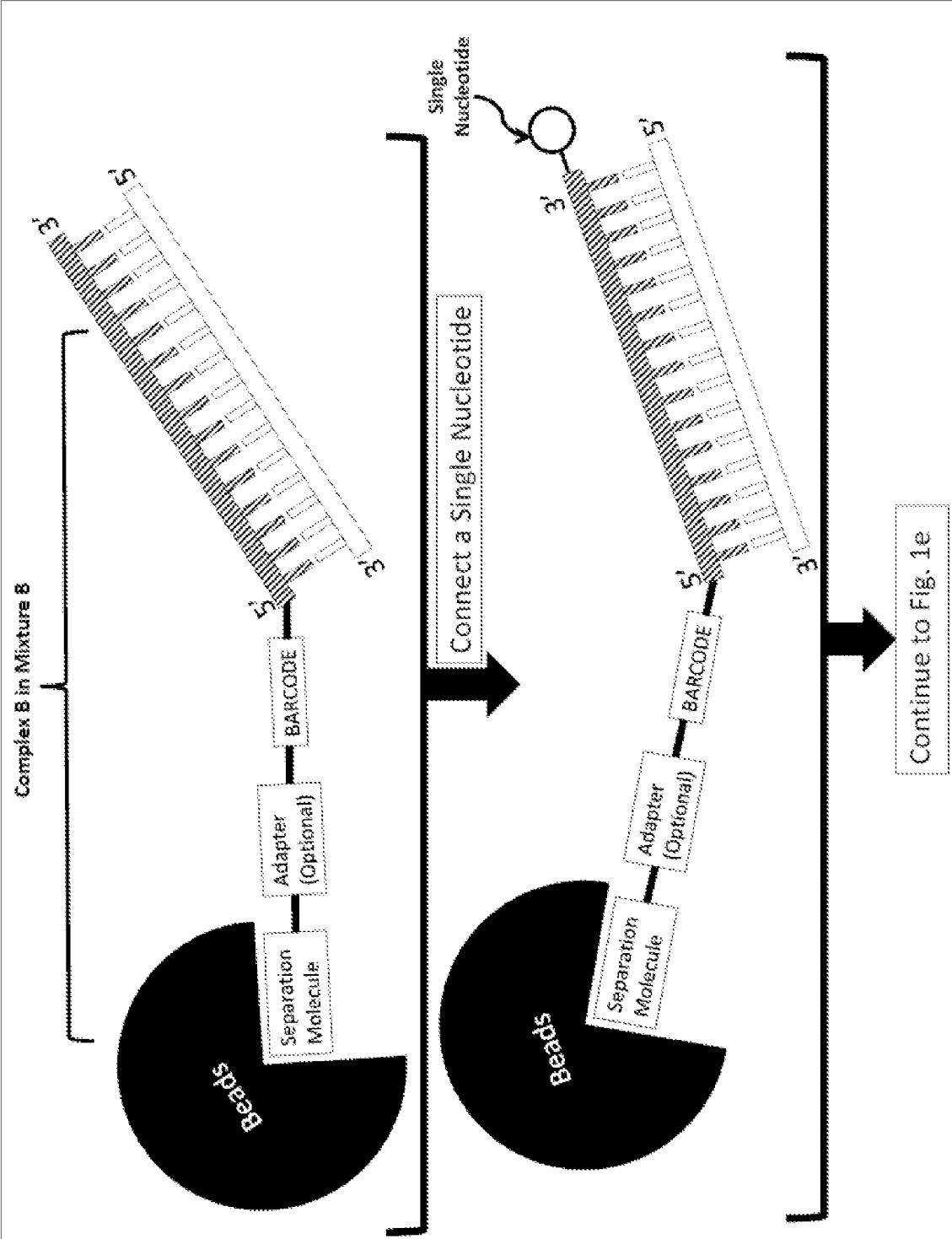
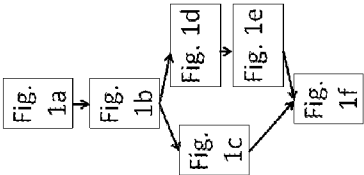


Figure 1d



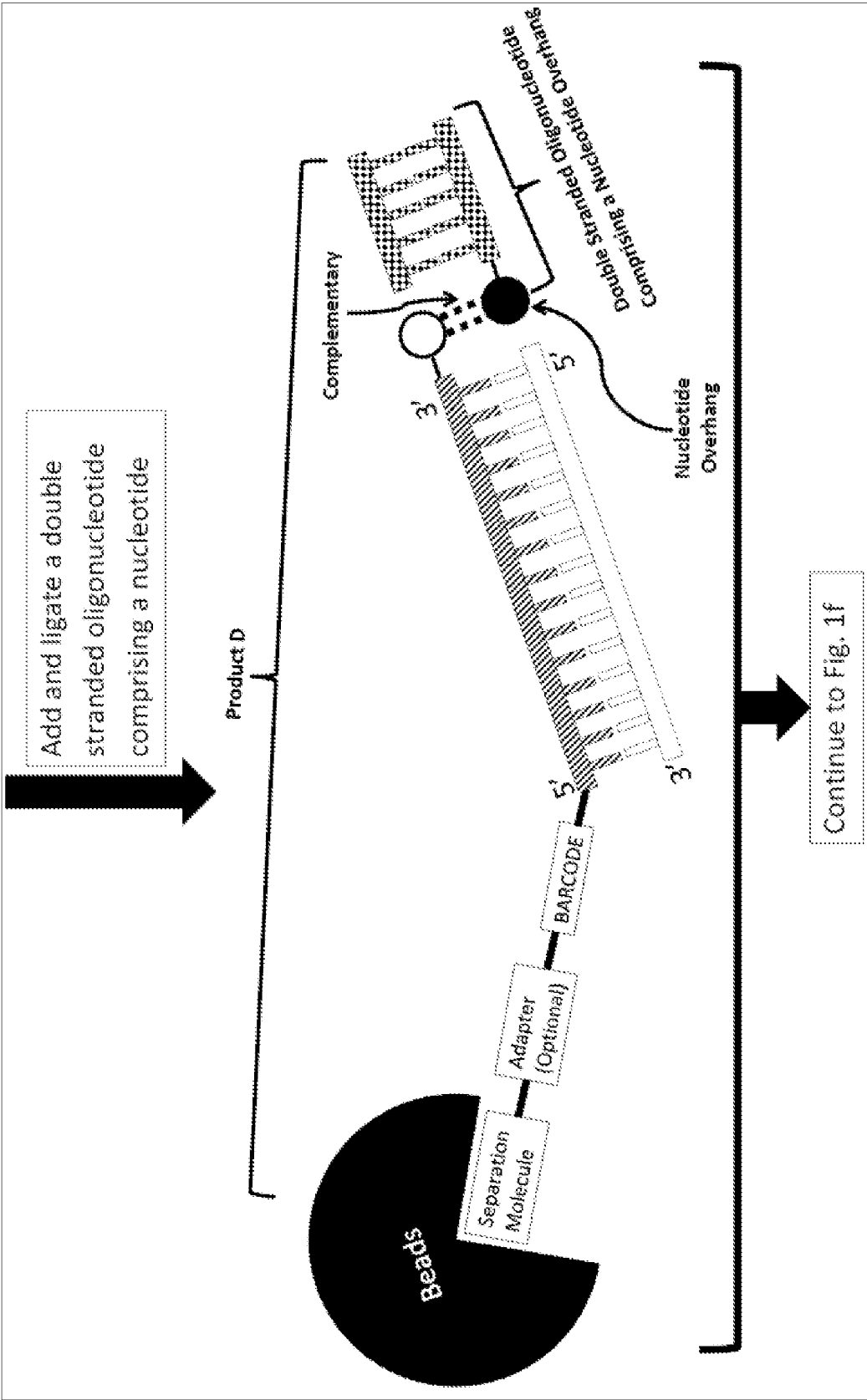
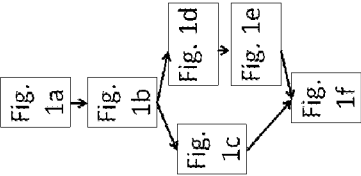
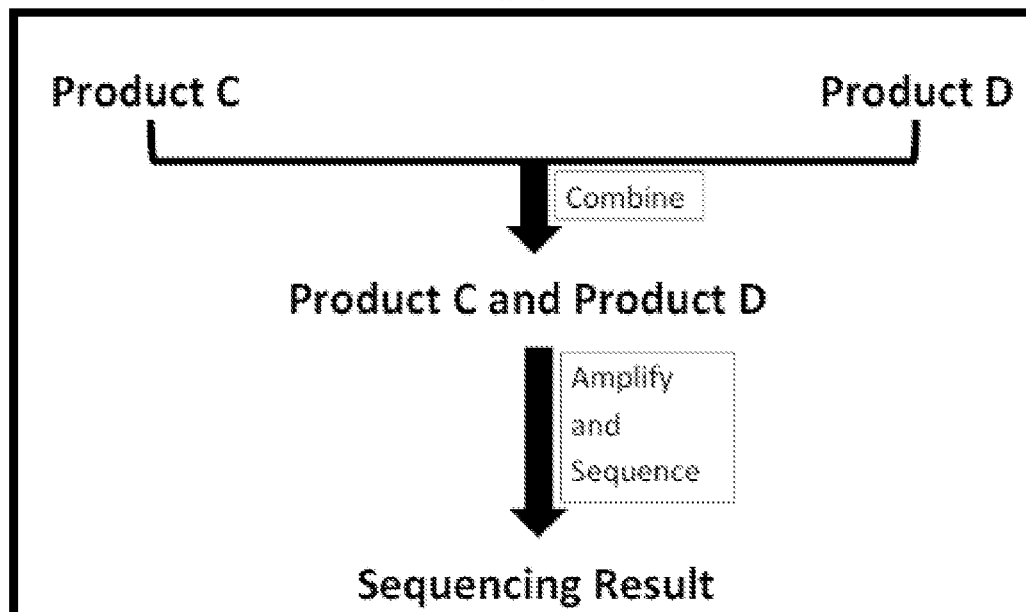
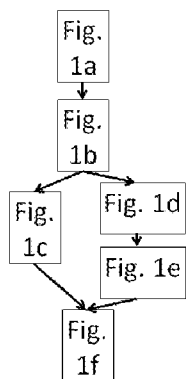


Figure 1e



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**Figure 1f**

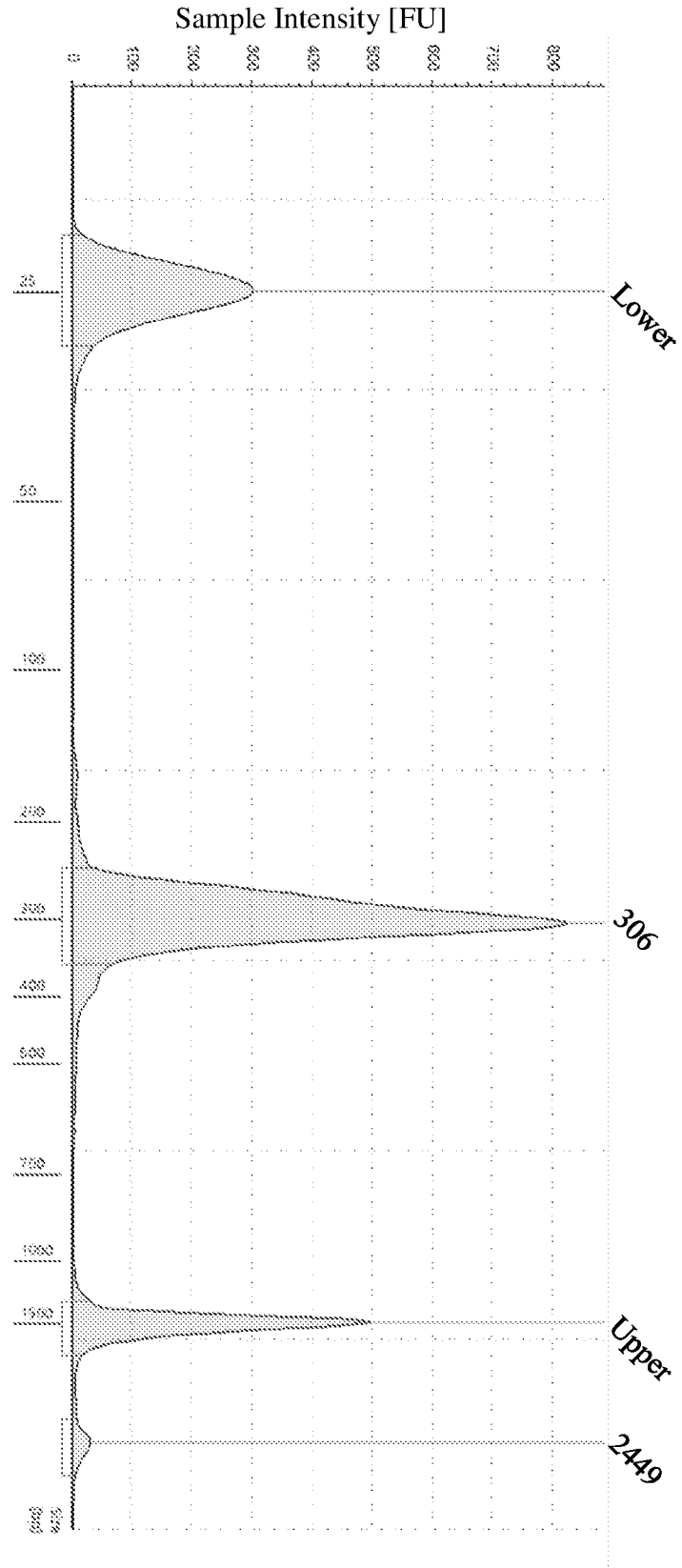


Figure 2a

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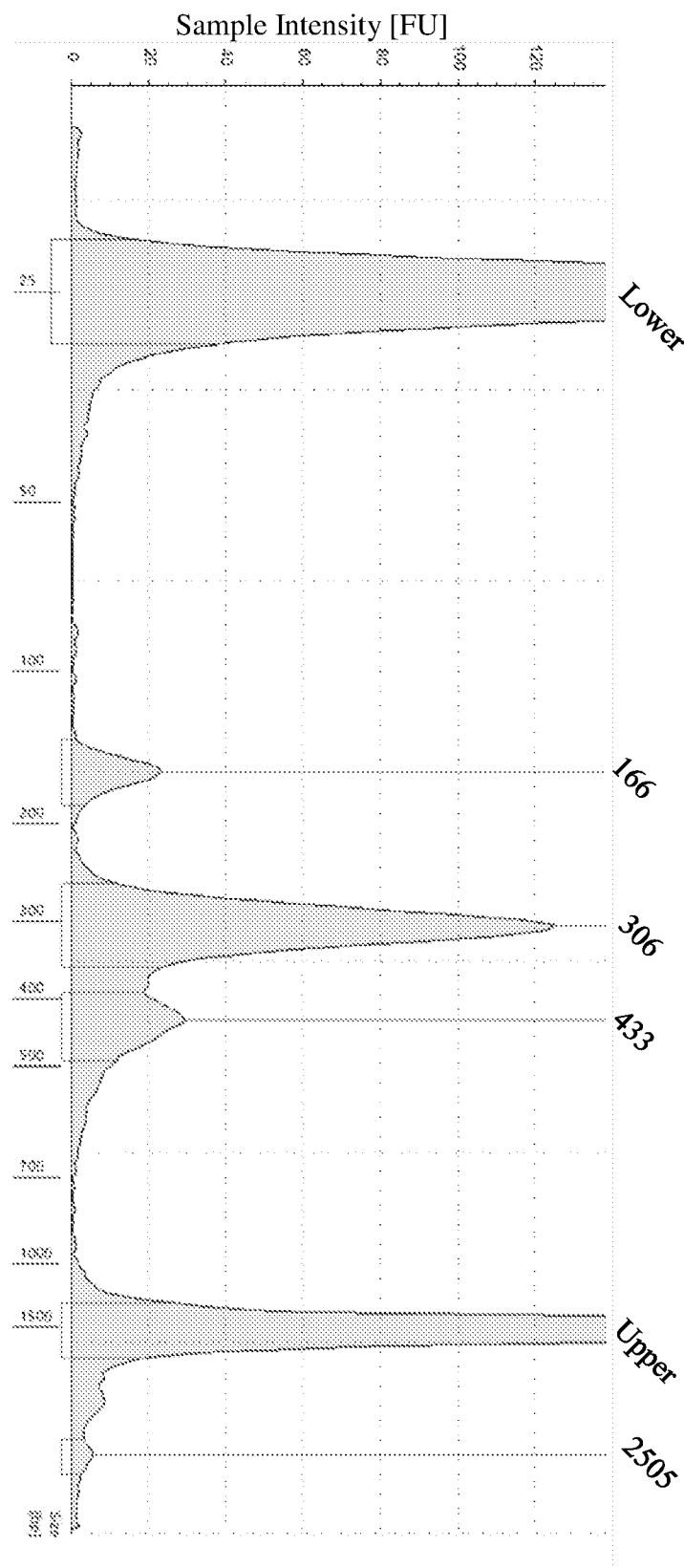
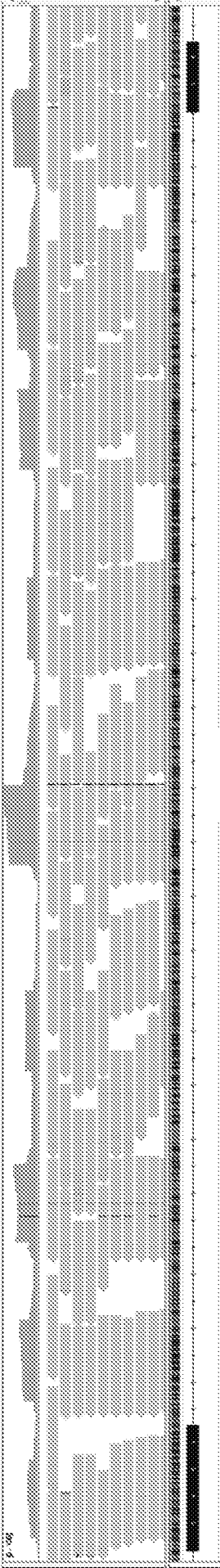
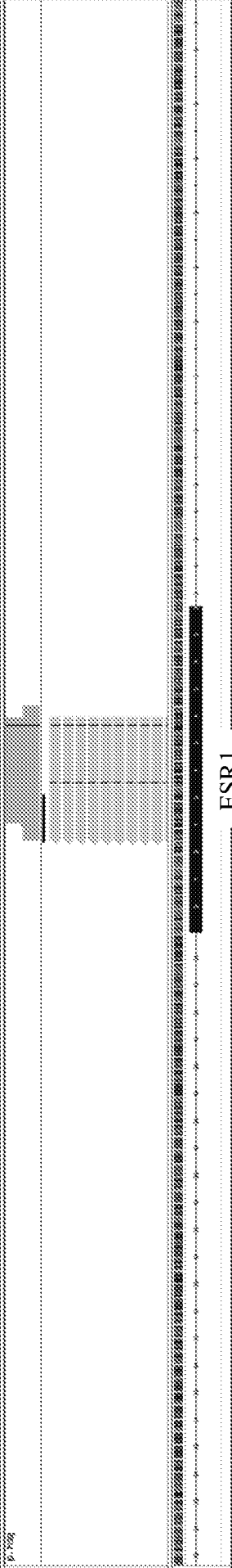


Figure 2b



ALK

Figure 3a



ESR1

Figure 3b

Variant	0% VAF		0.1% VAF		1% VAF		5% VAF	
	Expected	Observed	Expected	Observed	Expected	Observed	Expected	Observed
EGFR								
E746_A750delELRA	0.00	0.00	0.10	0.06	1.00	1.79	5.00	6.50
EGFR								
L858R	0.00	0.00	0.10	0.12	1.00	0.62	5.00	6.07
EGFR								
T790M	0.00	0.00	0.10	0.04	1.00	0.17	5.00	3.21
EGFR								
V769_D770insASV	0.00	0.00	0.10	0.14	1.00	1.38	5.00	7.20
KRAS								
G12D	0.00	0.00	0.10	0.06	1.00	0.87	5.00	4.38
NRAS								
A59T	0.00	0.00	0.10	0.05	1.00	0.53	5.00	6.27
NRAS								
Q61K	0.00	0.00	0.10	0.16	1.00	1.23	5.00	8.14
PIK3CA								
E545K	0.00	0.00	0.10	0.12	1.00	2.15	5.00	7.26
Average	0.00	0.00	0.10	0.09	1.00	1.09	5.00	6.13
SD	0.00	0.00	0.00	0.05	0.00	0.67	0.00	1.61

Figure 4a

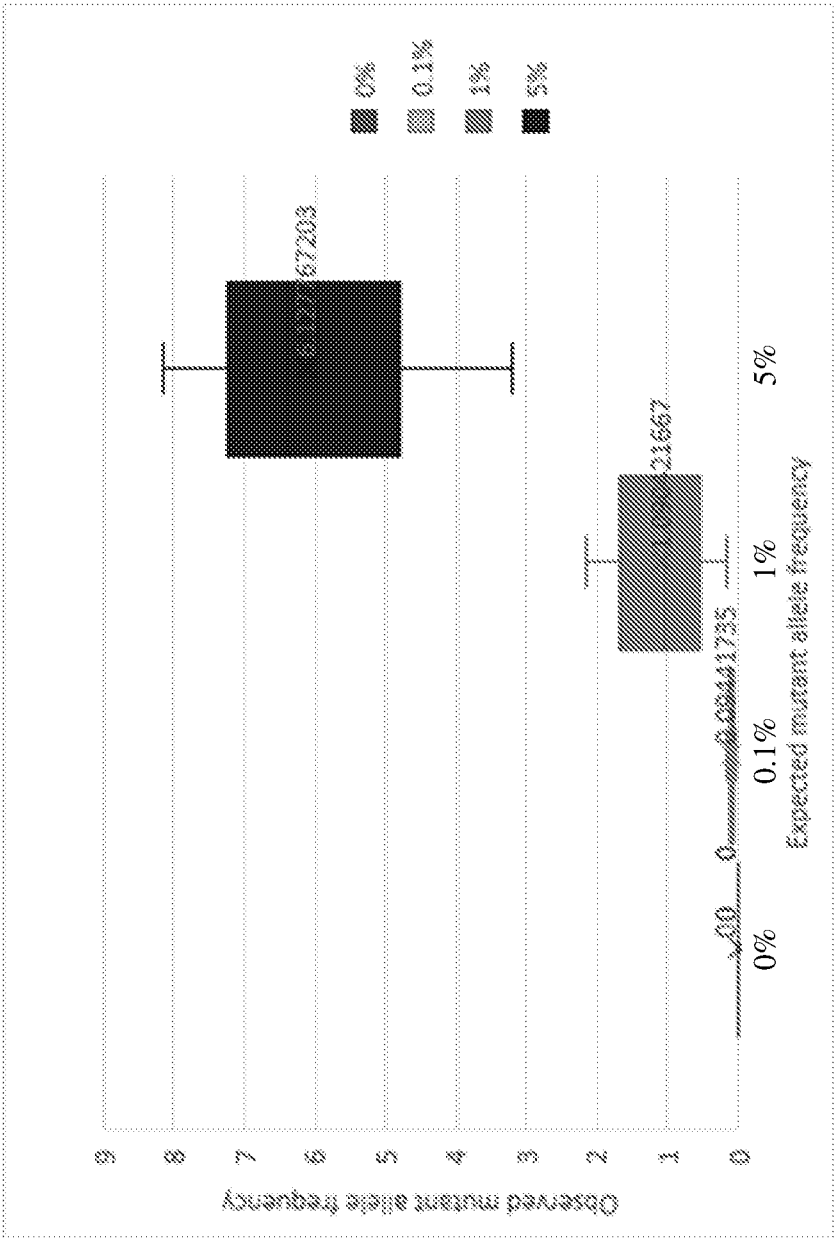


Figure 4b

Variant allele frequency		0.10 %		1 %		5 %	
Mutation Class	SNV's	Sensitivity >67%	Specificity >99%	Sensitivity >99%	Specificity >99%	Sensitivity >99%	Specificity >99%
	INDELs	>99%	>99%	>99%	>99%	>99%	>99%

Figure 4c

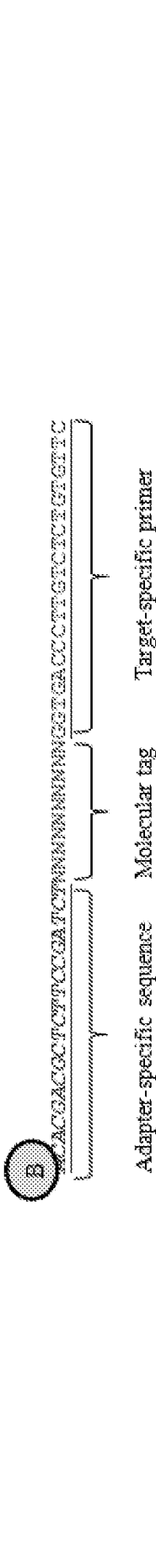


Figure 5

5' ACACGACGCTCTTCGATCTNNNNNNNNNGGTGACCTTGTCTCTGTGTTT-----extension-----
Target: 3' CCAC TGGGAACAGACAGACACAAAGaaacaggggggtcgaacacccctcggaggaatgtgggtca-

Figure 6

P-OATCGGAAGACACATTC-3'
|||||
T-CTAGCCCTTCGTGTGCAG-5'

Figure 7

Figure 8a

Figure 8b

Figure 9

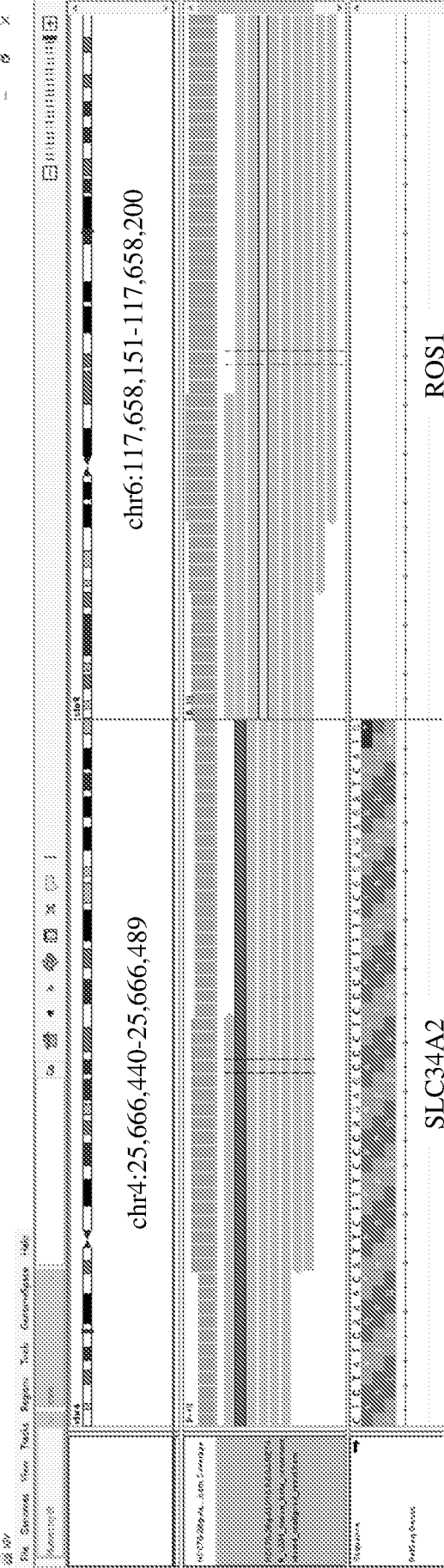


Figure 10a

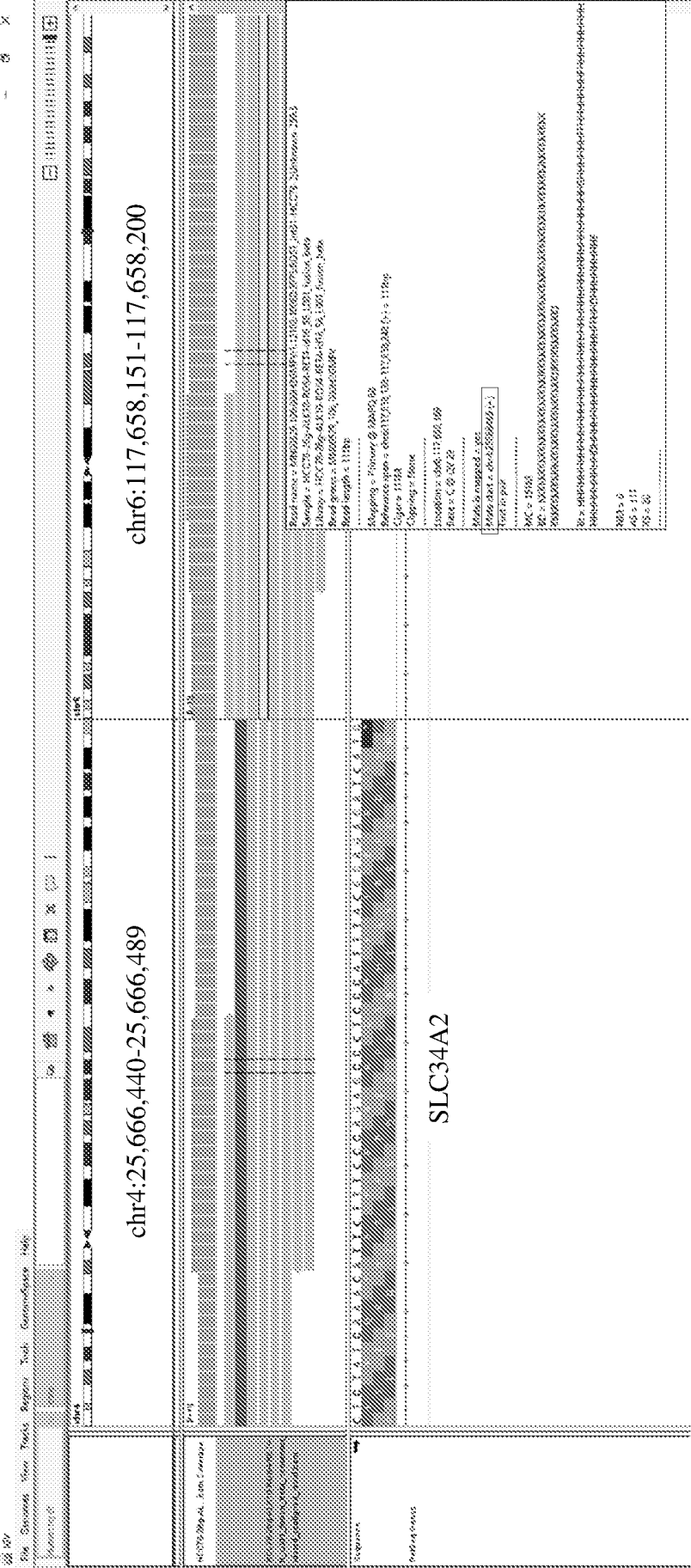


Figure 10b

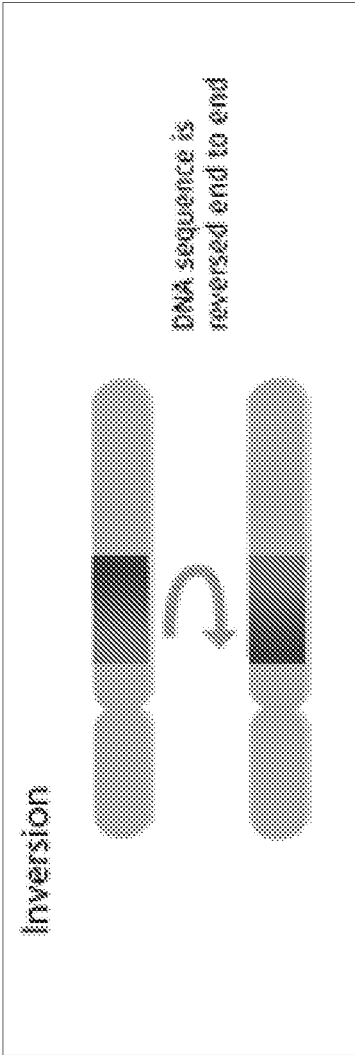


Figure 11a

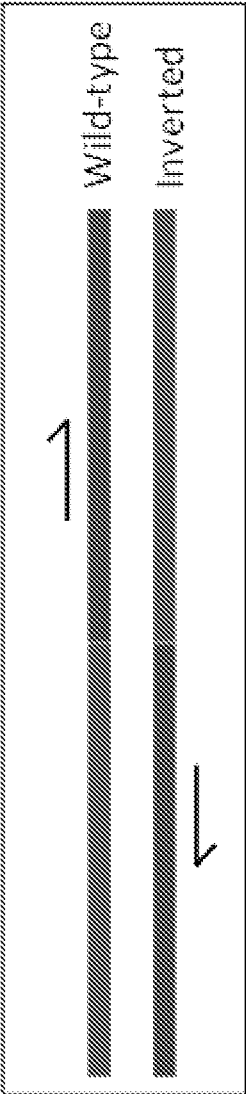


Figure 11b

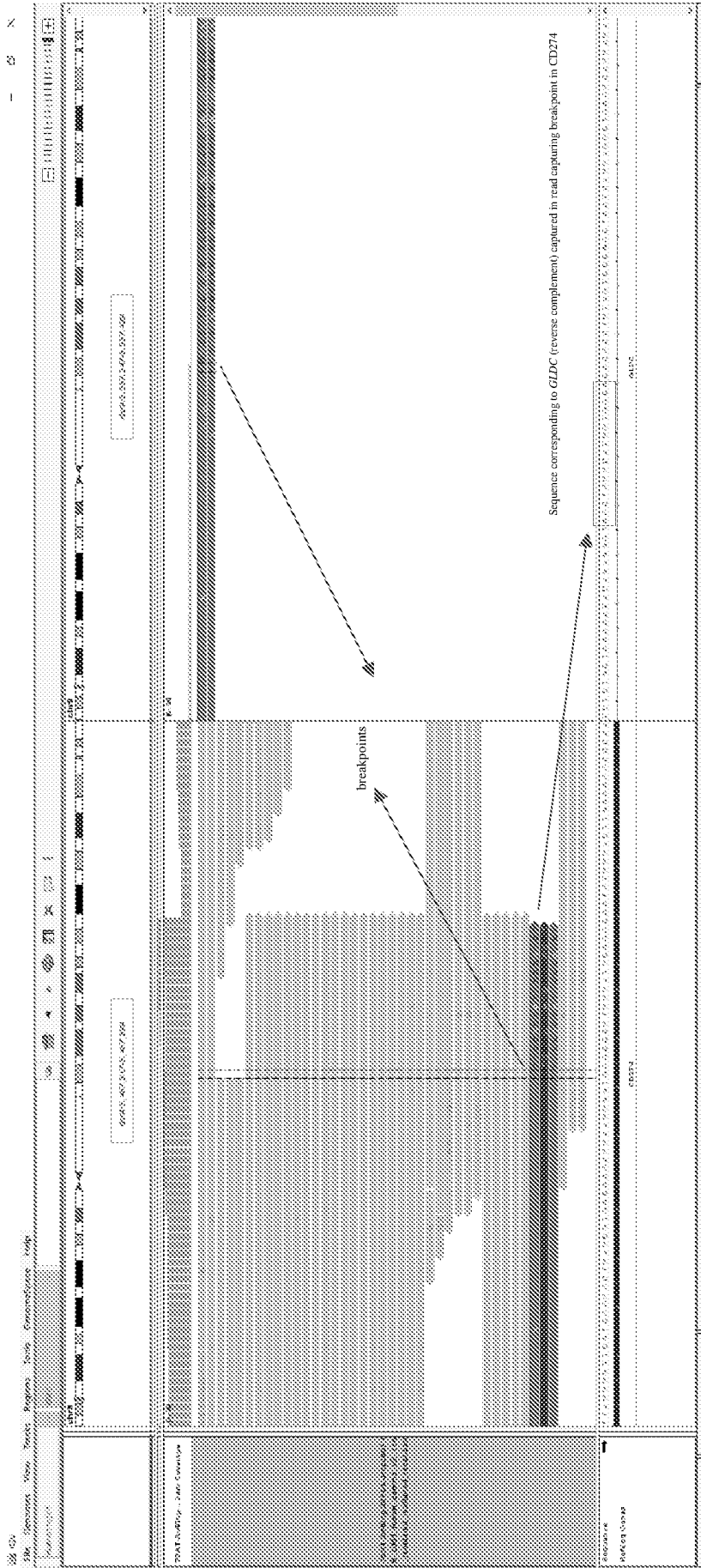


Figure 12

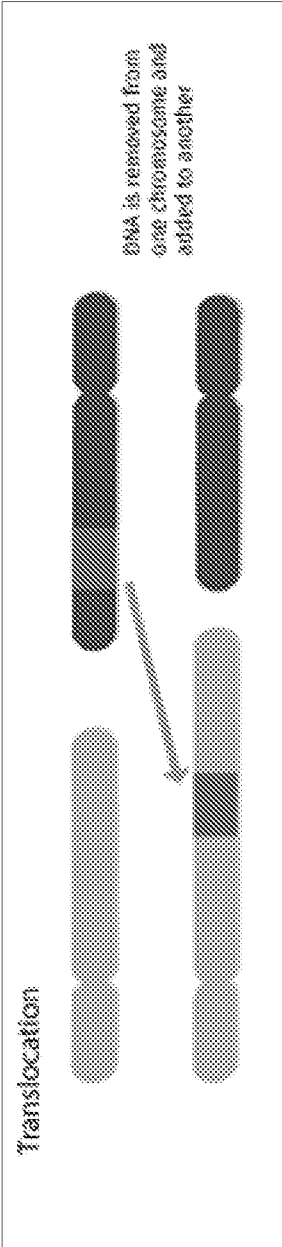


Figure 13

