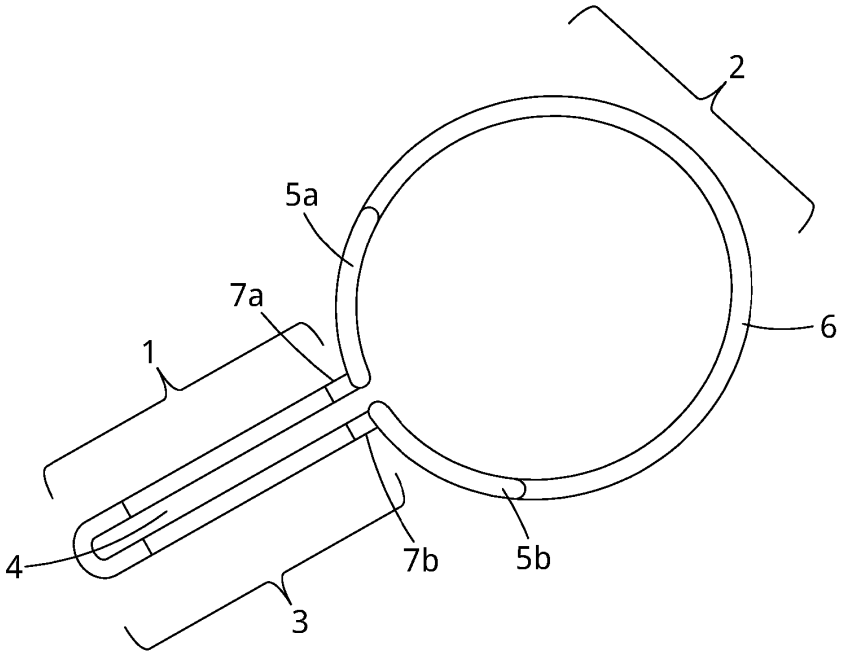


FIG. 1A

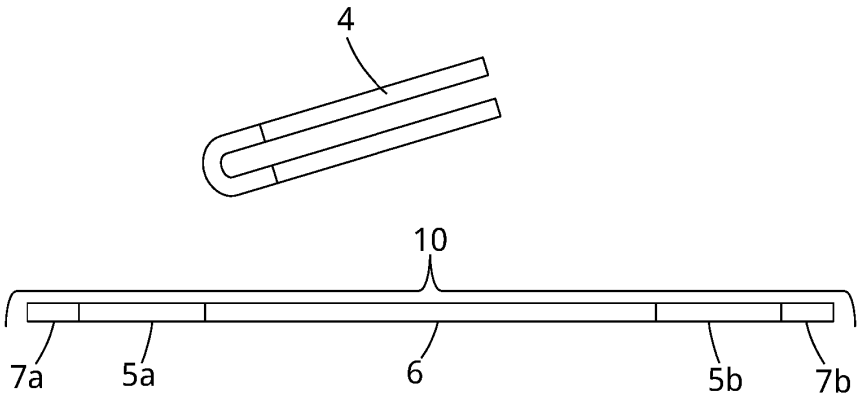


FIG. 1B

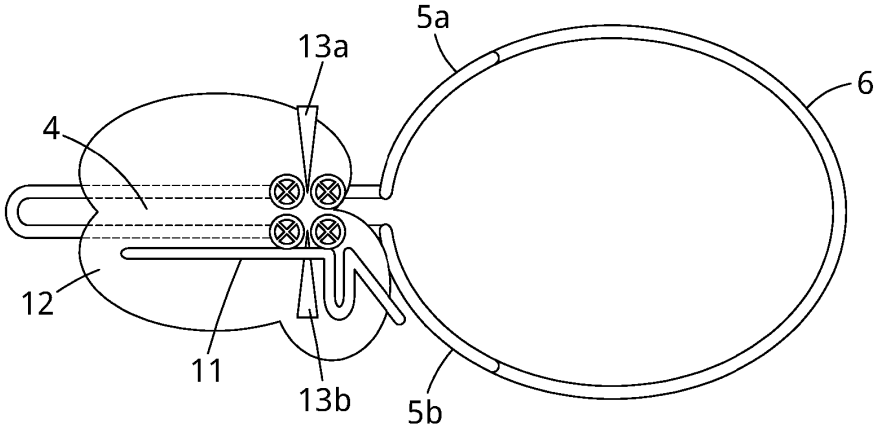


FIG. 2

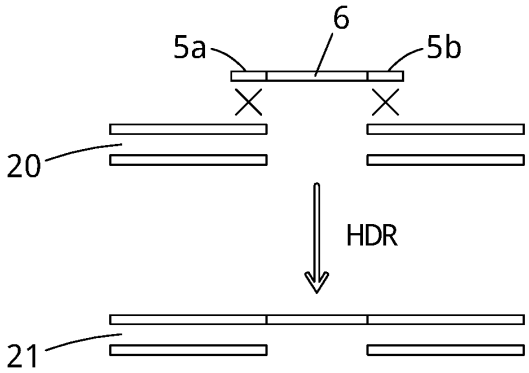


FIG. 3

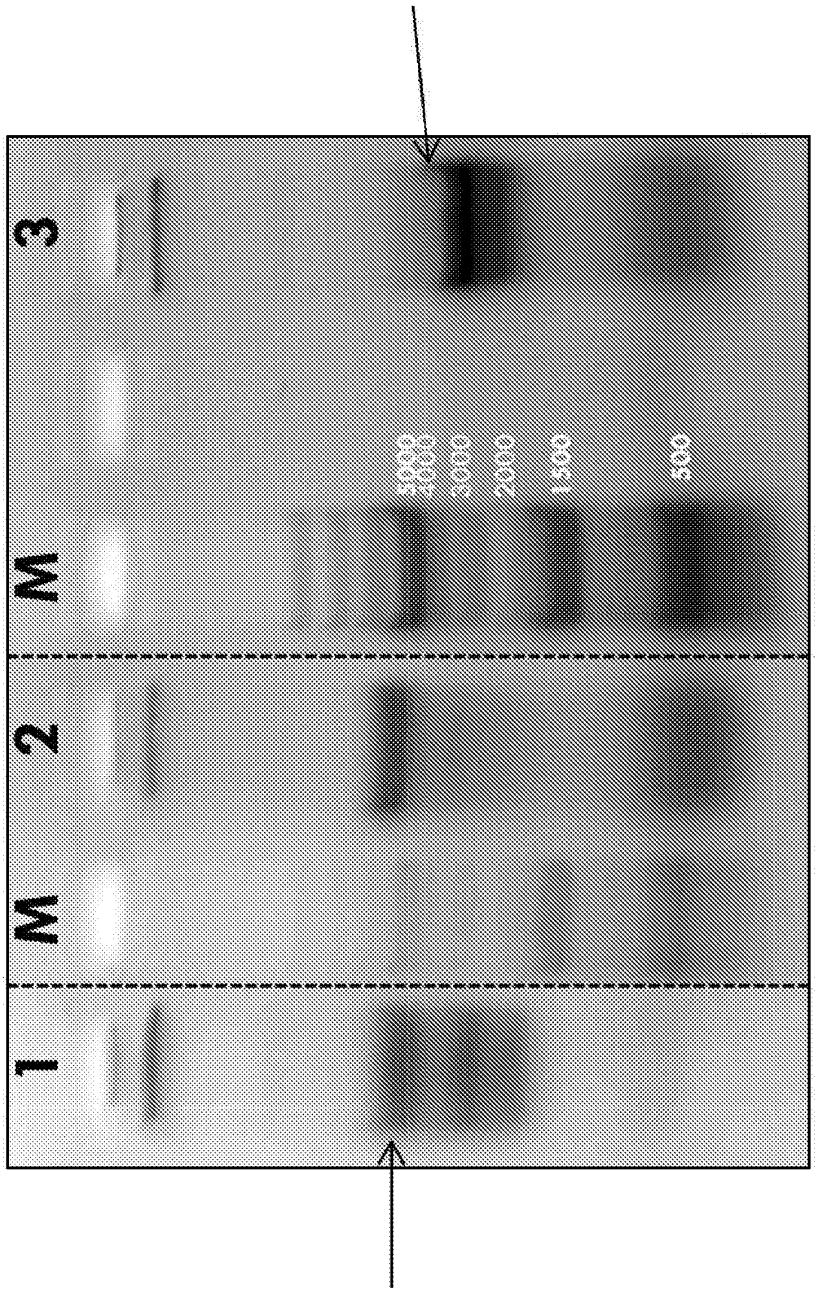


FIG. 4

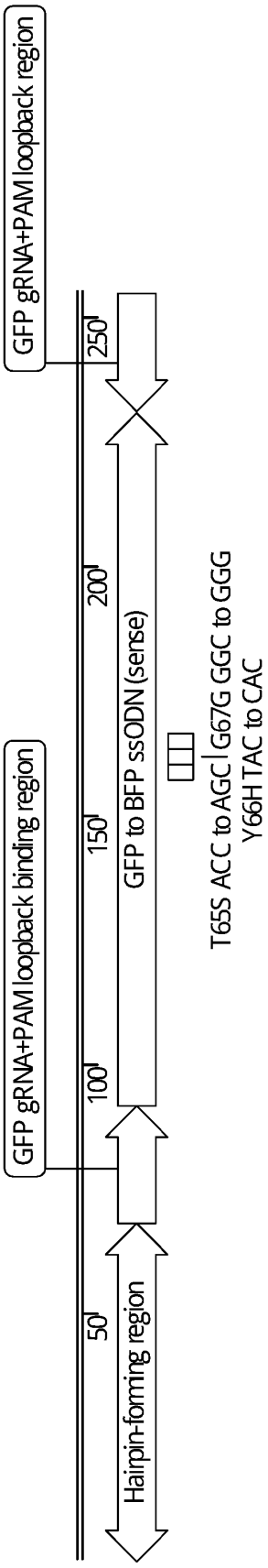

GFP gRNA+PAM loopback region
GFP gRNA+PAM loopback binding region
Hairpin-forming region
50
100
150
200
250
GFP to BFP ssODN (sense)
T65S ACC to AGC | G67G GGC to GGG
Y66H TAC to CAC

FIG. 5

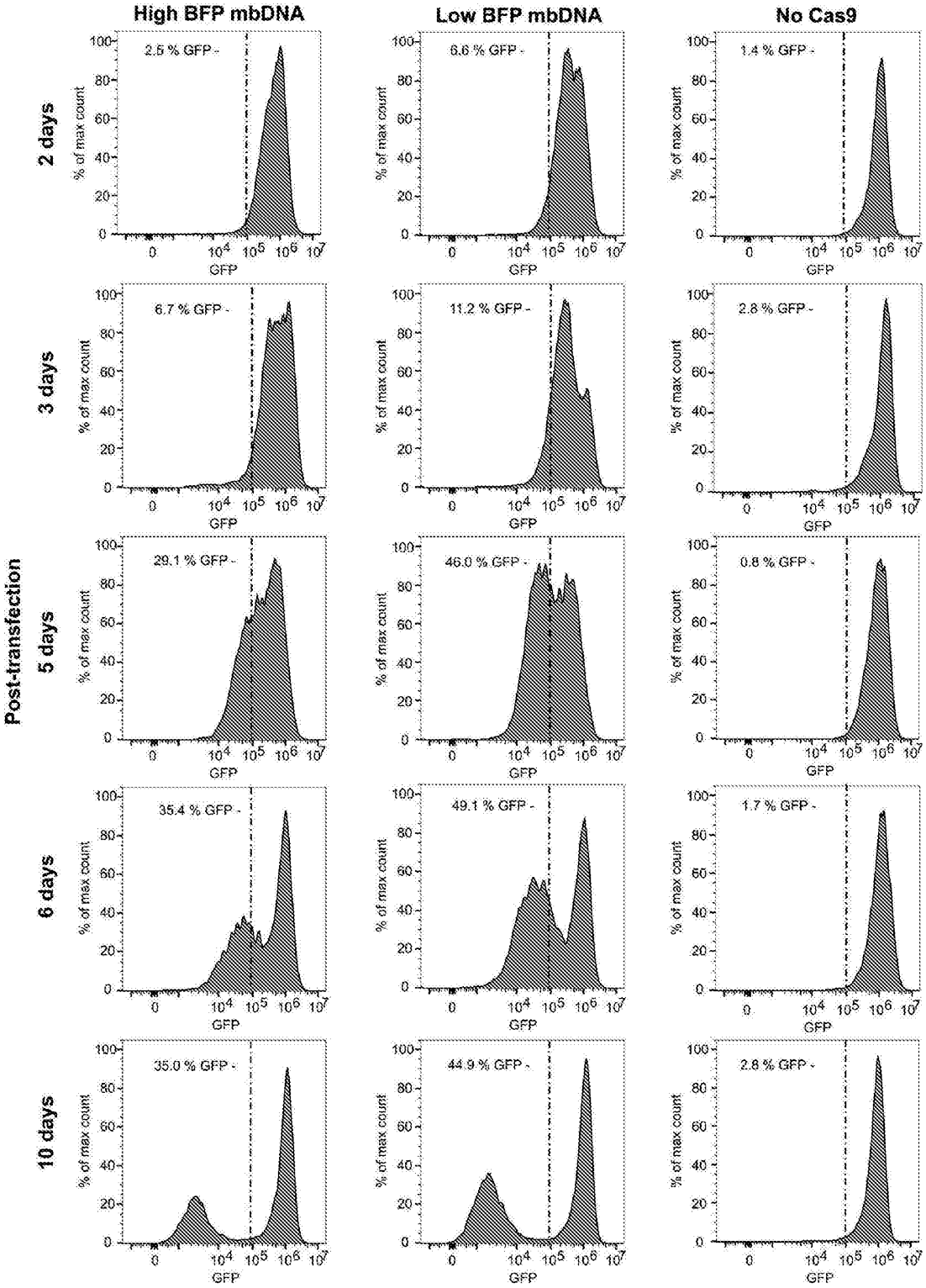

High BFP mbDNA
Low BFP mbDNA
No Cas9
Post-transfection
2 days
3 days
5 days
6 days
10 days
2.5 % GFP -
6.6 % GFP -
1.4 % GFP -
6.7 % GFP -
11.2 % GFP -
2.8 % GFP -
29.1 % GFP -
46.0 % GFP -
0.8 % GFP -
35.4 % GFP -
49.1 % GFP -
1.7 % GFP -
35.0 % GFP -
44.9 % GFP -
2.8 % GFP -
% of max count
GFP

FIG. 6

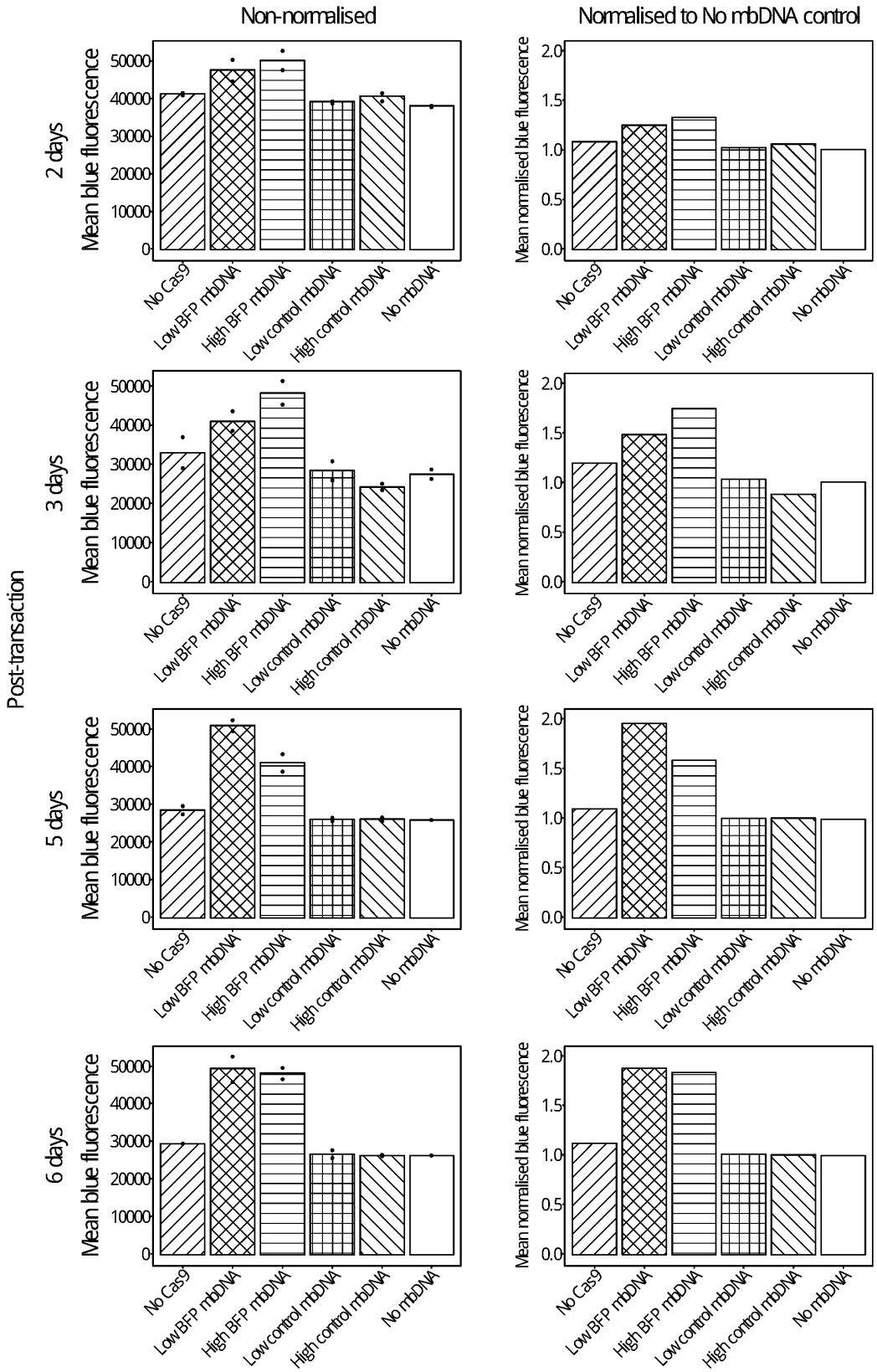

Non-normalised
Normalised to No mbDNA control
Post-transaction
2 days
3 days
5 days
6 days
Mean blue fluorescence
Mean normalised blue fluorescence
0
10000
20000
30000
40000
50000
0.0
0.5
1.0
1.5
2.0
No Cas9
Low BFP mbDNA
High BFP mbDNA
Low control mbDNA
High control mbDNA
No mbDNA

FIG. 7