

1AB guide pair

```
ref + CCTTCTGATAATCCCATCCATGAAAGTATGTGGGAACTGGAGGTAGAAGATTTACACAGGAATATTCCCTTAGAGTATGTTGGAAC
      GGGTAGGTACTTTCATACACCCT          TGGAGGTAGAAGATTTACACAGG
ref - GGAAAGACTATTAGGGTAGGTACTTTCATACACCCTTGACCTCCATCTTCTAAATGTGTCCTTATAAGGAATCTCATACAACCTTG

1-2   CCTTCTGATAATCCCATCCATGAAAGTATGTGGGAACTGG-- 14-bp del -CACAGGAATATTCCCTTAGAGTATGTTGGAAC
1-2   CCTTT-- 14-bp del -CATGAAAGTATGTGGGAACTGGAGGTAGAAGATTTACACAGGAATATTCCCTTAGAGTATGTTGGAAC

1-3   CCTTCTGATAATCCCATCCATGAAAGTATGT----- 48-bp del -----TGGAAC
```

4AB guide pair

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ref + CTGCAGCCCTGAGCCCTGCCTGCAGGCTGTGAAGATGACAGACCTTCTGATAATCCCATCCATGAAAGTATGTGGGAA
      GGGACGGACGTCCGACACTTCTA          TCCCATCCATGAAAGTATGTGGG
ref - GACGTCGGGACTCGGGACGGACGTCCGACACTTCTACTGTCTGGAAGACTATTAGGGTAGGTACTTTCATACACCCTT

4-6   CTGCAGCCCTGAGCCCTG----- 55-bp del -----TGGGAA
4-6   CTGCAGCCCTGAGCCCTG----- 95-bp ins + 50-bp del -----GTATGTGGGAA
```

1-2

14 bp deletion in coding sequence (cds)

c.413_426del

14 bp deletion in cds

c.378_391del

1-3

only one PCR product detectable on gel

48 bp deletion spanning stop

c.402_*5del

4-6

55 bp deletion in cds

c.347_401del

50 bp deletion in cds and a 95 bp insertion

c.348_397delins chr8:33126352-33126446