S10 Figure

A. **Bzg013 (*mms21-CH mre11*)**
Mapped junction sequence

```
                                    :ChrV 42277+
                                    :CCCGGGACCCCGGG:CATAAGTGCATAGTAGGCACAGACCTGA
                                     |||||||||||||| |||||||||||||||||||||||||||||
GACAGATCAGGTCTGTGCCTACTATGCACTTATG:CCCGGGACCCCGGG:CATAAGTGCATAGTAGGCACAGACCTGA
|||||||||||||||||||||||||||||||||| |||||| |||||||
GACAGATCAGGTCTGTGCCTACTATGCACTTATG:CCCGGGGTCCCGGG:
                                      ChrV 42277-:
```

B. **Potential inversion formation mechanism**

```
DSB
↓
5'-CCCGGGACCCCGGGCATAAGTGCATAGTAGGCACAGACCTGATCTGTCGGGTGCAGTTTA...-3'
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
3'-GGGCCCTGGGGCCCGTATTCACGTATCATCCGTGTCTGGACTAGACAGCCCACGTCAAAT...-5'
```

↓ 5' resection to generate 3' overhang

```
                                                5'-TGATCTGTCGGGTGCAGTTTA...-3'
                                                   ||||||||||||||||||||
3'-GGGCCCTGGGGCCCGTATTCACGTATCATCCGTGTCTGGACTAGACAGCCCACGTCAAAT...-5'
```

↓ intramolecular loop formation

```
2 base loop    T CCCGGG-3'
               G ||||||
                 GGGCCCGTATTCACGTATCATCCGTGTCTGGACTAGACAGCCCACGTCAAAT...-5'
```

↓ DNA replication

```
2 base loop    T CCCGGGCATAAGTGCATAGTAGGCACAGACCTGATCTGTCGGGTGCAGTTTA-3'
               G ||||||||||||||||||||||||||||||||||||||||||||||||||||
                 GGGCCCGTATTCACGTATCATCCGTGTCTGGACTAGACAGCCCACGTCAAAT...-5'
```