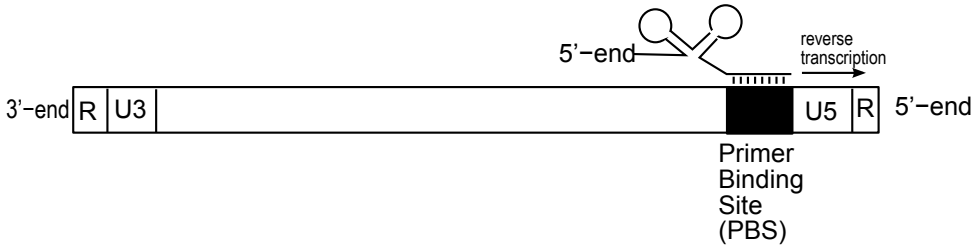
(A) LTR 5'−end structure



(B) PBS of Harlequin (ERV1)

```
3'−AGCAAAGGGCCAGTCCCTTGGT−5'  PBS of Harlequin
                              (chr1:168,301,725−168,301,747)
   ||||||||||||||||||||||
5'−TCGTTTCCCGGTCAGGGAACCA−3'  Our small RNA sequence
                              (zza22501a16t3.scf|369|390, n=499)
   ||| ||||||||||||||||
5'−TCGATTCCCGGTCAGGGAA−3'     3'−end of tRNA
      ▲                       (chr1.trna109−GluCTC)
     57th
```

(C) PBS of HERVK9 (ERVK), or MER61A(ERV1)

```
3'−AGCTCGGGGTGCAACCCGCGGT−5'  PBS of
                                  HERVK9     (chr5:51,636,598−51,636,619)
   ||| ||||||||||||||||||      or MER61A−int (chr6:76,792,740−76,792,761)
5'−TCGTGCCCCACGTTGGGCGCCA−3'  Our small RNA sequence
                              (zza22501g02t3.scf|184|205, n=70)
   ||| ||||||||||||||||
5'−TCGAGCCCCACGTTGGGCG−3'     3'−end of tRNA
      ▲                       (chr16.trna10−LysCTT)
     58th
```

(D) PBS of HERVK3 (ERVK) , or LTR3B (ERVK)

```
3'−AGTGCAGGGACAAGCCCGCGGT−5'  PBS of HERVK3, or LTR3B
                              (chr19:62,716,223−62,716,244)
   ||| ||||||||||||||||||
5'−TCAGGTCCCTGTTCGGGCGCCA−3'  Our small RNA sequence
                              (zza22504m18t3.scf|384|405, n=18)
   ||| ||||||||||||||||
5'−TCAAGTCCCTGTTCGGGCG−3'     3'−end of tRNA
      ▲                       (chr11.trna5−LysTTT)
     58th
```