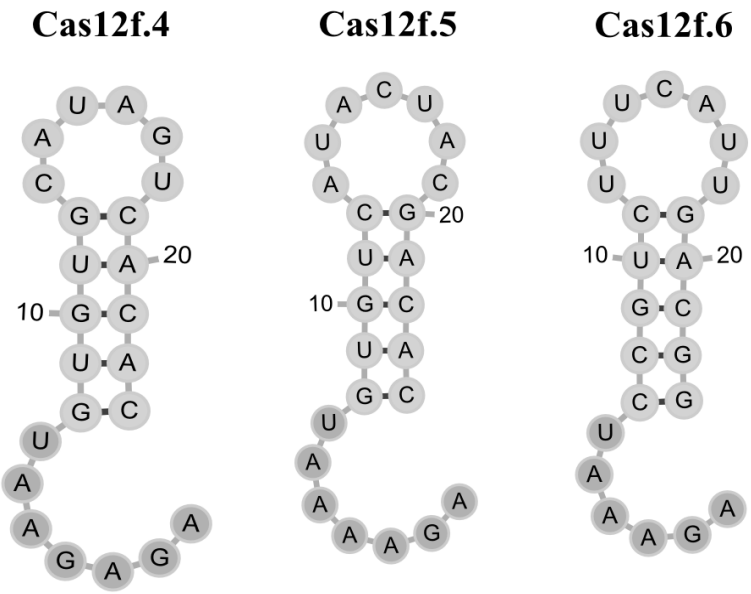


Figure 1

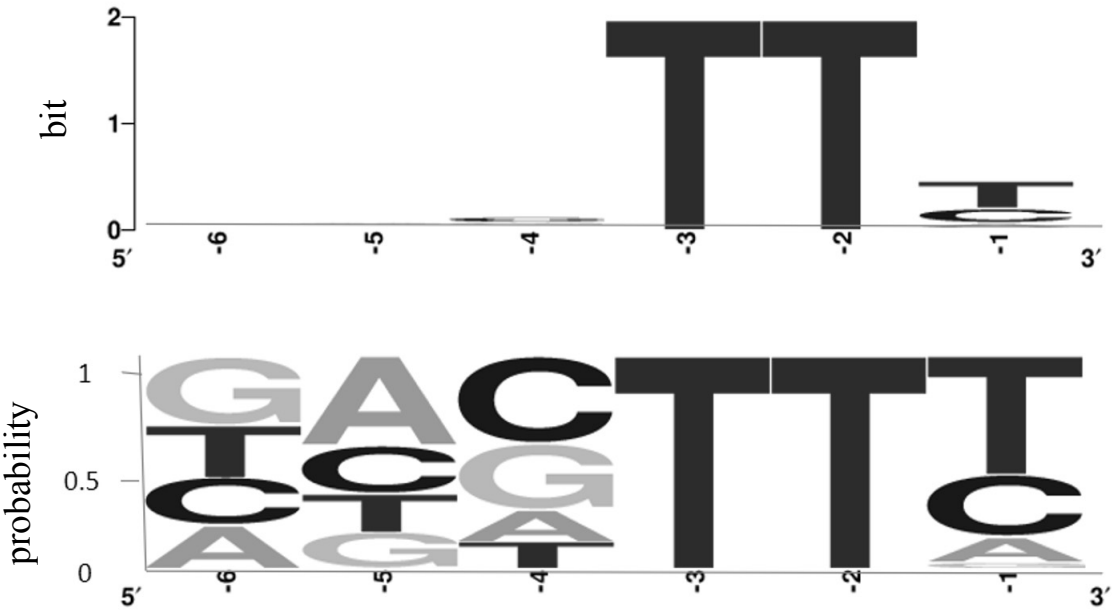


Figure 2

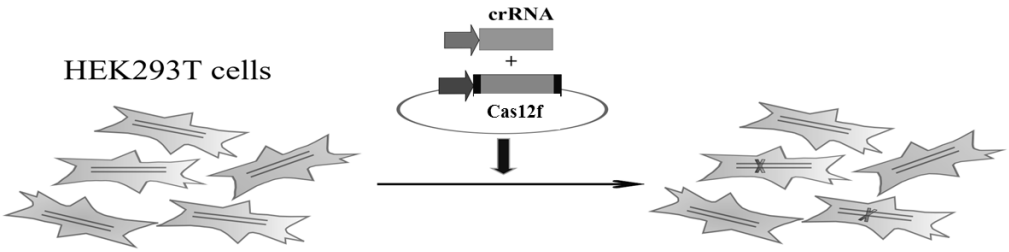


Figure 3a

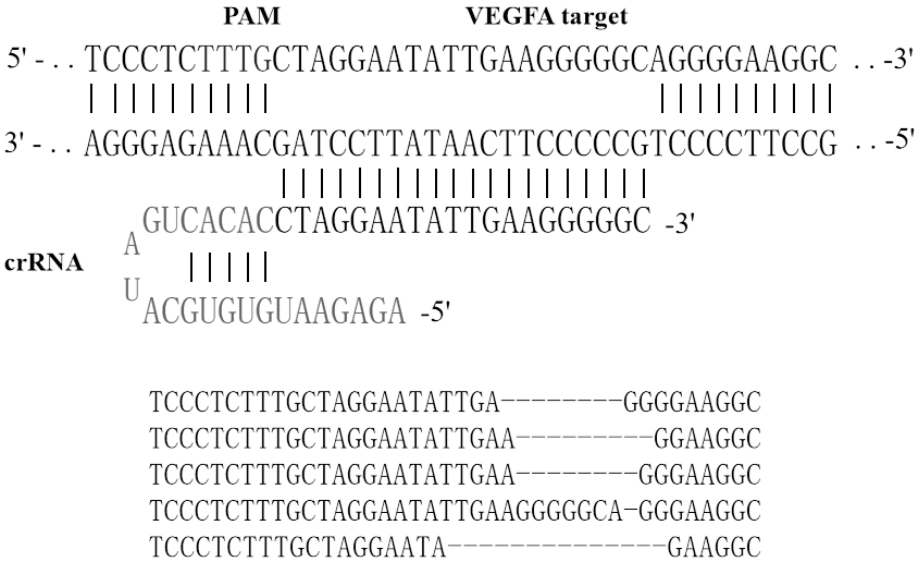


Figure 3b

	target gene	number of indels	total number of Read (Total Read)	editing efficiency
Cas12f.4	VEGFA	4,571	108,873	4.20%
Cas12f.5	VEGFA	549	176,723	0.31%
Cas12f.6	VEGFA	390	202,251	0.19%

Figure 3c

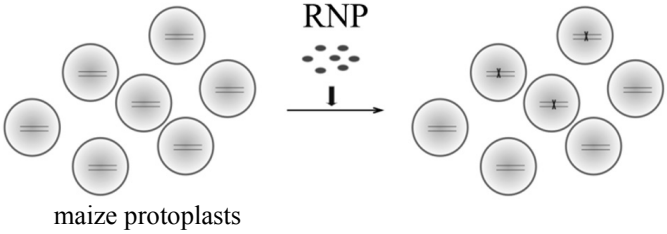


Figure 4a

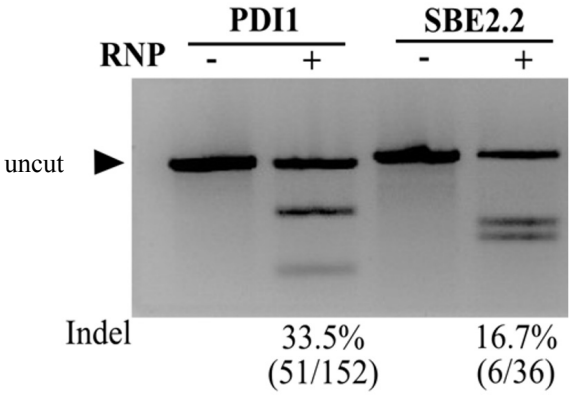


Figure 4b

PDI1 target

5' - CTTGATTTCCTTGTCCTTGAATTCCTCCGCGGCAGCAGAGTAGGCAG -3' Indel

```
CTTGATTTCCTTGTCCTTGA----------CAGCAGAGTAGGCAG     -12
CTTGATTTCCTTGTCCTTGAATT----------CAGCAGAGTAGGCAG  -9
CTTGATTTCCTTGTCCTTGAATT-------CGGCAGCAGAGTAGGCAG  -6
CTTGATTTCCTTGTCCTTGAAT---TCCGCGGCAGCAGAGTAGGCAG   -3
CTTGATTTCCTTGTCCTTGAA----------------AGAGTAGGCAG -15
CTTGATTTCCTTGTCCTTGA----------------AGAGTAGGCAG  -16
CTTGATTTCCTTGTCCTTGAATT----------CAGCAGAGTAGGCAG -9
CTTGATTTCCTTGT--------------------GCAGAGTAGGCAG  -20
CTTGATTTCCTTGTCCTTGAA--------------GCAGAGTAGGCAG -13
CTTGATTTCCTTGTCCTT------------------AGAGTAGGCAG  -18
```

SBE2.2 target

5' - GGCCTTTTCGGTGGATTTAGTCGGCTTGATCATGATGCCGAGTACTT -3' Indel

```
GGCCTTTTCGGTGGATTTAGTCG----------ATGCCGAGTACTT   -11
GGCCTTTTCGGTGGATTTAGTC-----------GATGCCGAGTACTT   -11
GGCCTTTTCGGTGGATTTA----------ATGATGCCGAGTACTT     -12
GGCCTTTTCGGTGGATTTAGTC----------ATGCCGAGTACTT     -12
GGCCTTTTCGGTGGATTTAA----------ATGCCGAGTACTT       -14
GGCCTTTTCGGTGGATTT------------------GCCGAGTACTT  -18
```

Figure 4c