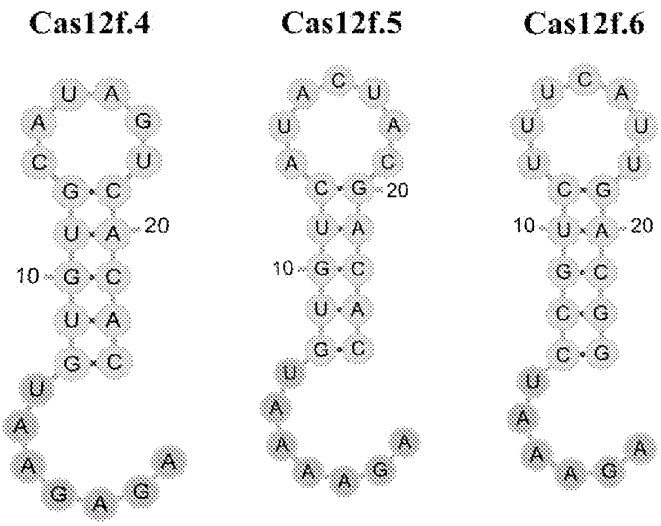



图 1

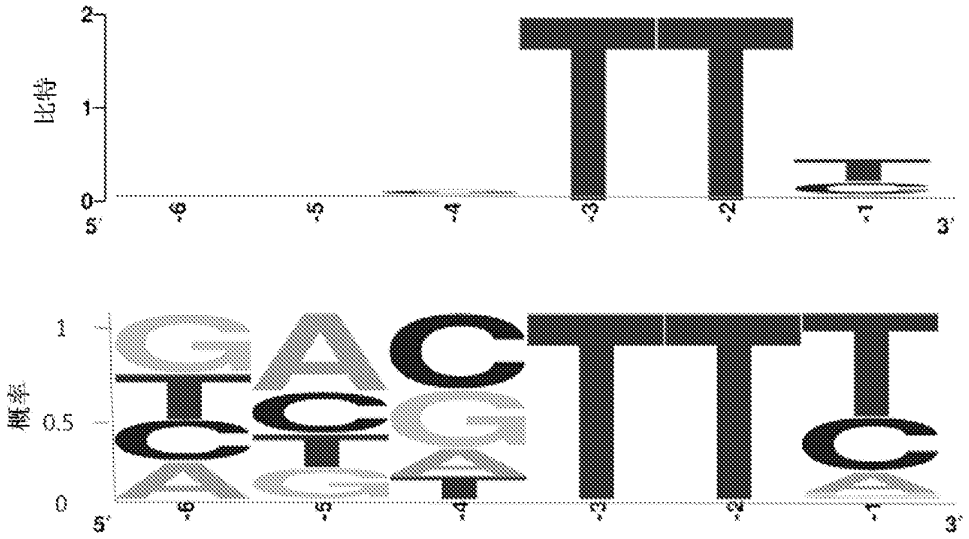



图 2

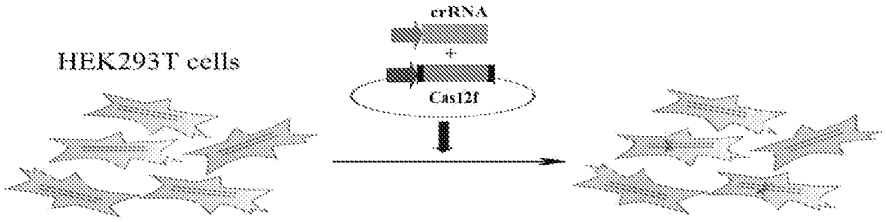



图 3a

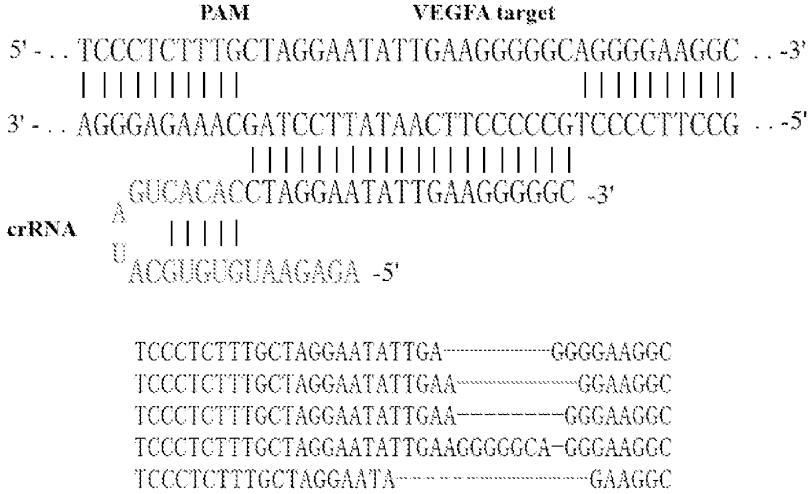



图 3b

| | 目标基因 | Indel数量 | 总Read数量 （Total Read） | 编辑效率 |
|---|---|---|---|---|
| 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% |

图 3c

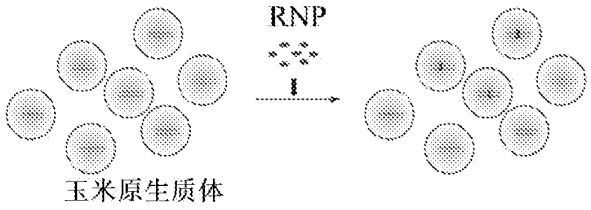

RNP
玉米原生质体

图 4a

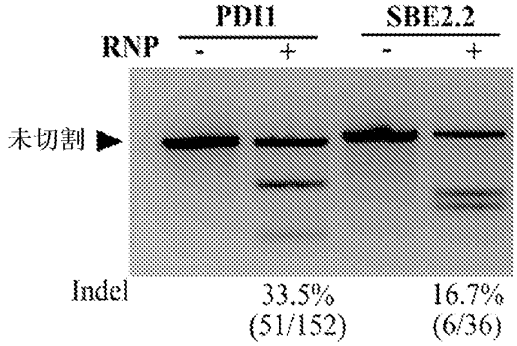

PDI1
SBE2.2
RNP
-
+
-
+
未切割
Indel
33.5%
(51/152)
16.7%
(6/36)

图 4b

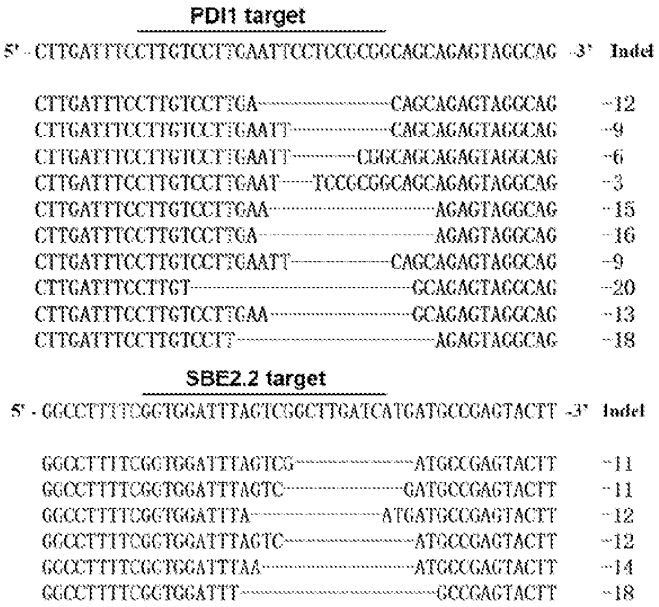

PDI1 target
5' - CTTGATTTCCTTGTCCTTGAATTCCTCCCCGCCAGCAGAGTAGGCAG -3' Indel
CTTGATTTCCTTGTCCTTGA··········CAGCAGAGTAGGCAG -12
CTTGATTTCCTTGTCCTTGAATT··········CAGCAGAGTAGGCAG -9
CTTGATTTCCTTGTCCTTGAATT··········CGGCAGCAGAGTAGGCAG -6
CTTGATTTCCTTGTCCTTGAAT·····TCCGCGGCAGCAGAGTAGGCAG -3
CTTGATTTCCTTGTCCTTGAA··········AGAGTAGGCAG -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

图 4c