

Supplementary

Supplementary Table 1 primers, guides and molecular beacons used in this study

Name of the Primers, guides and molecular beacons	Sequence (5'-3')
Primers used for testing the reverse transcriptase and DNA polymerase of RTX (exo-)	
25FAM	6-FAM-CCCTCGCAGCCGTCCAACCAACTCA
RT-RNA	CGAAAACGGCAUUAUAUGAUUAUCUUGAGUUGGUUGG ACGGCUGCGAGGG
Blocker	CCCTCGCAGCCGTCCAACCAACTCACAAGATATCATATAAT GCCGTTTTTCG
ΔDNA-F	GGCCTCTGTCGTTTCCTTTCTCTG
ΔDNA-1R	GGTGAGCGTGTTATCCCGGTG
ΔDNA-2R	CCGTAGACGGATGCCCCTTTAATG
ΔDNA-4R	GCATCACCGCTTCCTGAACTTC
Primers, guides and molecular beacons used for targets of N gene	
4-f	AATAAGCATATTGACGCATACAAAACATTCCCACC
4-r	TCTGTCTCTGCGGTAAGGCTTGAGTTTCATC
4-g1	CTTTTATAGGCTCTGTT
4-g2	GTCCTTTTATAGGCTCT
4-g3	TTTGTCTTTTATAGGC
4-g4	CTTTTGTCTTTTAA
4-g5	CTTCTTTTGTCTTT
4-g6	CTTCTCTTTTGTCC
4-g7	AGCCTTCTCTTTTG
7-f	TCAAGCCTTACCGCAGAGACAGAAGAAACAGC
7-r	GCTCATGGATTGTTGCAATTGTTTGGAGAAATCATCC
7-g1	AGAAGAGTCACAGTTT

7-g2	GGAAGAAGAGTCACAG
7-g3	GCAGGAAGAAGAGTCA
7-g4	GCAGCAGGAAGAAGAG
7-g5	TCTGCAGCAGGAAGAA
ct-g	GTTTGGTGGATGTGGA
22-F-1	GCAGAGACAGAAGAAACAGCAAACCTGTGACTC
22-R-1	GCTCATGGATTGTTGCAATTGTTTGGAGAAATCATC
ct-MB	6-FAM-tttacgCATCCACATCCACCAAACGTAATGcgtaaa-BHQ1
7-5MB	6-FAM-cgcaccTCCAAATCTGCAGCAGgggtgcg-BHQ1
614-F	CAAATACTTCTAACCAGGTTGCTGTTC
614-R	GCAACAGGGACTTCTGTGC
gWT	GATGTTAACCTGCACAG
gMT	GGTGTTAACCTGCACAG
MB-614	5' FAM-cgcaccTATCAGGATGTTAACCTgggtgcg-BHQ1-3'

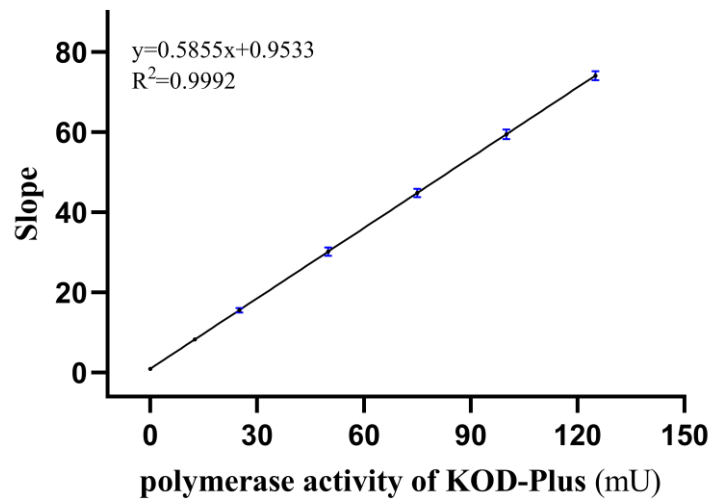


Figure S1. Titration of KOD-plus DNA Polymerase Activity determined with Eva EZ™ Fluorometric Polymerase Activity Assay Kit.

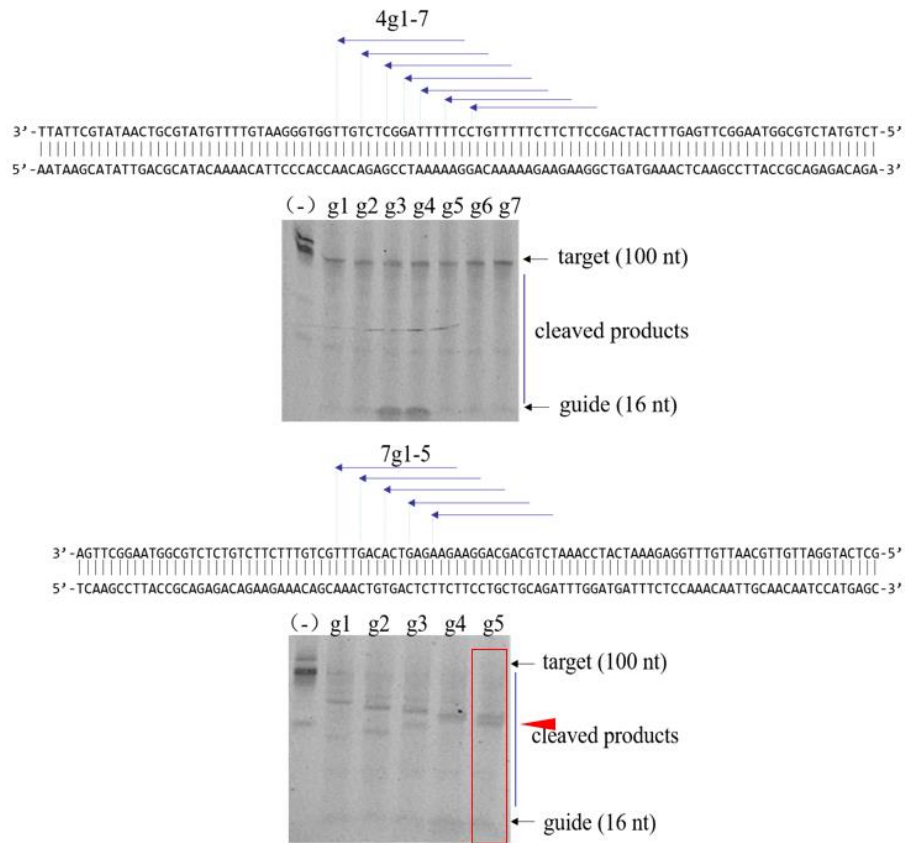


Figure S2. Screen analysis of input gDNA for efficient cleavage of the N gene by PfAgo. Guides 4g1-7 cover the first fragment while 7g1-5 cover the second fragment. The boundary of each guide is indicated on the top of the sequences. Urea-denaturing PAGE was performed to analyze the cleavage of the targets.