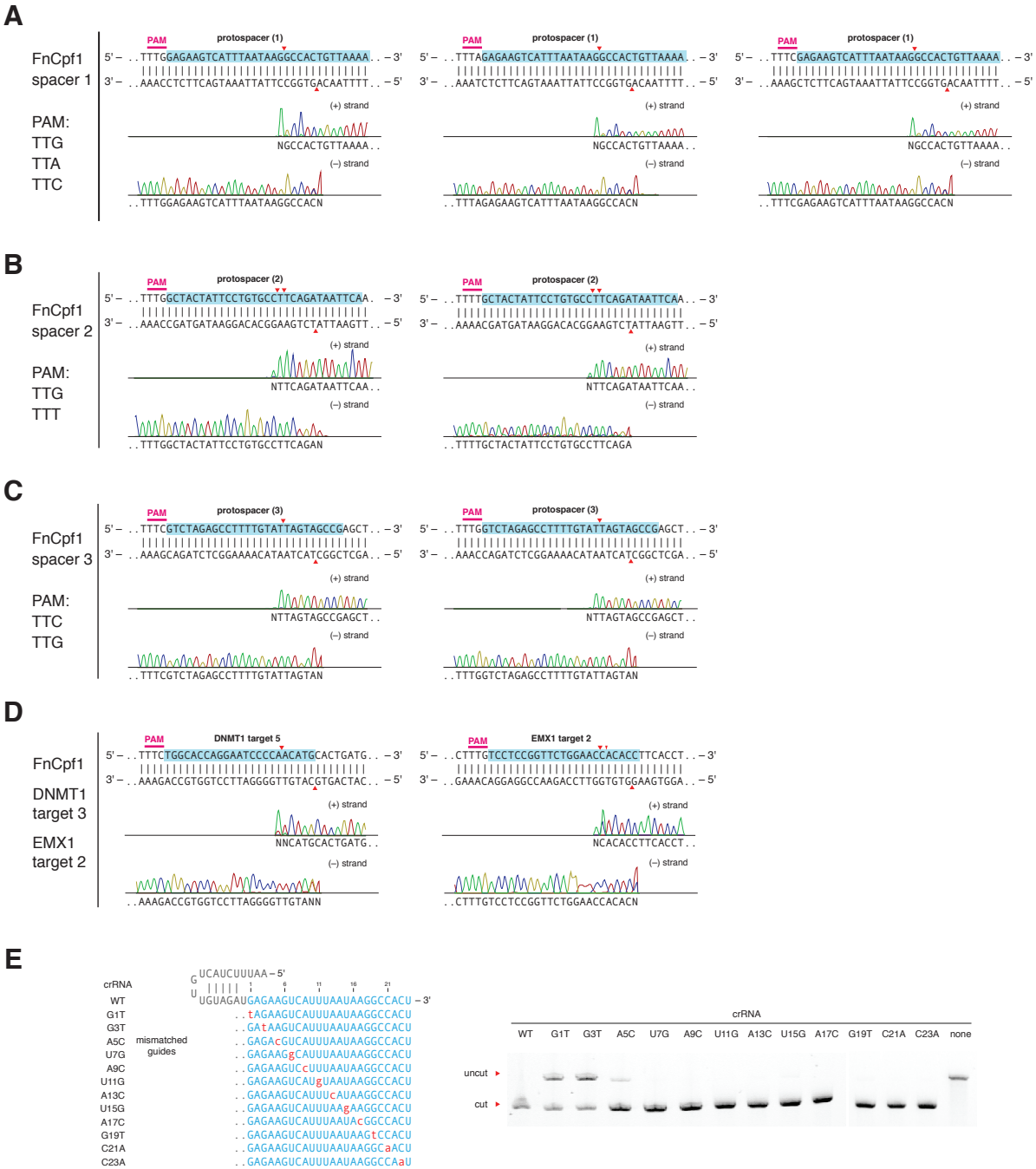
A
FnCpf1 spacer 1
PAM:
TTG
TTA
TTC
PAM
protospacer (1)
5′ – ..TTTGGAGAAGTCATTTAATAAGGCCACTGTTAAAA.. – 3′
3′ – ..AAACCTCTTCAGTAAATTATTCCGGTGACAATTTT.. – 5′
5′ – ..TTTAGAGAAGTCATTTAATAAGGCCACTGTTAAAA.. – 3′
3′ – ..AAATCTCTTCAGTAAATTATTCCGGTGACAATTTT.. – 5′
5′ – ..TTTCGAGAAGTCATTTAATAAGGCCACTGTTAAAA.. – 3′
3′ – ..AAAGCTCTTCAGTAAATTATTCCGGTGACAATTTT.. – 5′
(+) strand
NGCCACTGTTAAAA..
(–) strand
..TTTGGAGAAGTCATTTAATAAGGCCACN
..TTTAGAGAAGTCATTTAATAAGGCCACN
..TTTCGAGAAGTCATTTAATAAGGCCACN
B
FnCpf1 spacer 2
PAM:
TTG
TTT
protospacer (2)
5′ – ..TTTGGCTACTATTCCTGTGCCTTCAGATAATTCAA. – 3′
3′ – ..AAACCGATGATAAGGACACGGAAGTCTATTAAGTT.. – 5′
5′ – ..TTTTGCTACTATTCCTGTGCCTTCAGATAATTCAA.. – 3′
3′ – ..AAAACGATGATAAGGACACGGAAGTCTATTAAGTT.. – 5′
(+) strand
NTTCAGATAATTCAA..
(–) strand
..TTTGGCTACTATTCCTGTGCCTTCAGAN
..TTTTGCTACTATTCCTGTGCCTTCAGA
C
FnCpf1 spacer 3
PAM:
TTC
TTG
protospacer (3)
5′ – ..TTTCGTCTAGAGCCTTTTGTATTAGTAGCCGAGCT.. – 3′
3′ – ..AAAGCAGATCTCGGAAAACATAATCATCGGCTCGA.. – 5′
5′ – ..TTTGGTCTAGAGCCTTTTGTATTAGTAGCCGAGCT.. – 3′
3′ – ..AAACCAGATCTCGGAAAACATAATCATCGGCTCGA.. – 5′
(+) strand
NTTAGTAGCCGAGCT..
(–) strand
..TTTCGTCTAGAGCCTTTTGTATTAGTAN
..TTTGGTCTAGAGCCTTTTGTATTAGTAN
D
FnCpf1
DNMT1 target 3
EMX1 target 2
DNMT1 target 5
5′ – ..TTTCTGGCACCAGGAATCCCCAACATGCACTGATG.. – 3′
3′ – ..AAAGACCGTGGTCCTTAGGGGTTGTACGTGACTAC.. – 5′
EMX1 target 2
5′ – ..CTTTGTCCTCCGGTTCTGGAACCACACCTTCACCT.. – 3′
3′ – ..GAAACAGGAGGCCAAGACCTTGGTGTGGAAGTGGA.. – 5′
(+) strand
NNCATGCACTGATG..
NCACACCTTCACCT..
(–) strand
..AAAGACCGTGGTCCTTAGGGGTTGTANN
..CTTTGTCCTCCGGTTCTGGAACCACACN
E
crRNA
G UCAUCUUUAA – 5′
U UGUAGAUGAGAAGUCAUUUAAUAAGGCCACU – 3′
WT
G1T
G3T
A5C
U7G
A9C
U11G
A13C
U15G
A17C
G19T
C21A
C23A
mismatched guides
..tAGAAGUCAUUUAAUAAGGCCACU
..GAtAAGUCAUUUAAUAAGGCCACU
..GAGAcGUCAUUUAAUAAGGCCACU
..GAGAAGgCAUUUAAUAAGGCCACU
..GAGAAGUCcUUUAAUAAGGCCACU
..GAGAAGUCAUgUAAUAAGGCCACU
..GAGAAGUCAUUUcAUAAGGCCACU
..GAGAAGUCAUUUAAgAAGGCCACU
..GAGAAGUCAUUUAAUAcGGCCACU
..GAGAAGUCAUUUAAUAAGtCCACU
..GAGAAGUCAUUUAAUAAGGCaACU
..GAGAAGUCAUUUAAUAAGGCCAaU
crRNA
WT G1T G3T A5C U7G A9C U11G A13C U15G A17C G19T C21A C23A none
uncut
cut

Figure S3