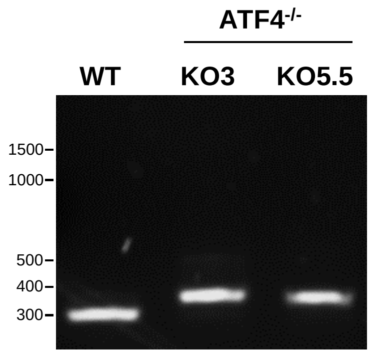
A



B

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                                                    PAM
          5′ TGCCCCCCTAGTCCAGGAGACTAATAAGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATCTCCC 3′
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
          3′ ACGGGGGGATCAGGTCCTCTGATTATTCGTCGGGGGGGTCTGCCACTTGGGTTAACCGGTAGAGGG 5′
                   PAM
ID     SEQUENCE
   5′                                                                                    3′
WT     TGCCCCCCTAGTCCAGGAGACTAATA           INS40NT                     AGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC
KO3    TGCCCCCCTAGTCCAGGAGACTAATAXXXXXXXXXXXXXXXXXXXXXXXXXXXCAGGAGACTAATAAGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC     ALLELE 1

WT     TGCCCCCCTAGTCCAGGAGACTAATA           INS43NT                         AGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC
KO3    TGCCCCCCTAGTCCAGGAGACTAATAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXAGGAGACTAATAAGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC   ALLELE 2

WT     TGCCCCCCTAGTCCAGGAGACTAATA           INS41NT                      AGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC
KO5.5  TGCCCCCCTAGTCCAGGAGACTAATAXXXXXXXXXXXXXXXXXXXXXXXXXXXXCAGGAGACTAATAAGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC     ALLELE 1

WT     TGCCCCCCTAGTCCAGGAGACTAATA           INS44NT                          AGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC
KO5.5  TGCCCCCCTAGTCCAGGAGACTAATAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXCAGGAGACTAATAAGCAGCCCCCCCAGACGGTGAACCCAATTGGCCATC ALLELE 2
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Fig. S5