

(a)

T36FL	ATGAGCTTTTCGGCGCTTGTGGTTAAAGGTTATGGCTGTAGTTACGGTATTATGGTACGGT	60
T36CA-V0	-----	60
T36CA-ori	-----	60
T36FL	AAAGAGCCTTCCATTAGTGAAGGTTACAATGCTCTCATGAATGACTTTAAGTTTATC	120
T36CA-V0	-----	120
T36CA-ori	-----	120
T36FL	GATACGCATTTTACAAACGTTTCTTACGCTAAGAAATGTTACGATTTGGCTAATTTTCGAT	180
T36CA-V0	-----T-----	180
T36CA-ori	-----T-----	180
T36FL	TTAGACTTTCTACGCATCGTTATCATTCCTTTGAGTGGGGGTACGGTGAATGAATCGCGT	240
T36CA-V0	-----T-----	240
T36CA-ori	-----T-----	240
T36FL	GCTGATCGCACTAACGTTTCAGAAATTGTCGAATCGCATGTGAGCGACCGAGACAGGATG	300
T36CA-V0	-----	300
T36CA-ori	-----C-----C-----	300
T36FL	AGCATCTTGTTGCGTAATAAGCGGATCCAAATTCCTTCGCTCTTACCTTGGGATAACTAG	360
T36CA-V0	-----	360
T36CA-ori	-----	360

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Figure S1. Sequence comparison of the p13 and p20 coding regions between T36CA-ori and T36CA-V0. Nucleotide (nt) sequences of the p13 and p20 coding regions in T36CA-ori and T36CA-V0 were aligned with those of T36FL using the Clustal Omega program (<https://www.ebi.ac.uk/Tools/msa/clustalo/>). (a) The alignment of nt sequences of p13. (b) The alignment of nt sequences of p20. Nucleotide variants in T36CA-ori and/or T36CA-V0 are indicated in red. Non-synonymous nt variants are highlighted in blue; indicated below them are the resulting change in deduced amino acids (in bold).

(b)

T36FL	ATGCGAGCTTACTTTAGTGTTAATGATTACATAAGCCTTTTGGCTAAGGTCAGCGCTGTT	60
T36CA-V0	-----G-----	60
T36CA-ori	-----G-----C-----	60
	G18S A20V	
T36FL	GTGGAACGTTTATGCGATCCCAGCGTAACTCTTGC GGAAGTGATGGACGAAATTAATGAC	120
T36CA-V0	-----C-----	120
T36CA-ori	-----	120
T36FL	TTTAACTCGTTTCTCGCTTTAGTGCACTCTATGAAGTCAGACATGAACGGAGACCATCAG	180
T36CA-V0	-----A-----	180
T36CA-ori	-----G-----A-----	180
	D56N	
T36FL	GATGGCCACCACGAGATGGGTGAACACAAGTCTCGGTTGTTATGCAACATAGAGGCGAAA	240
T36CA-V0	-----	240
T36CA-ori	-----	240
T36FL	TTGCGAGTACTTCTCGACATCATAAGACGTCGGTTCCTCGCGACAAGCTGCTCTGTACT	300
T36CA-V0	-----	300
T36CA-ori	-----C-----	300
	S81L	
T36FL	AGCGCGACAGATGTCATGGGCTTCTTTGTAATGAGGTACATGAGTTCTAGCCACACCAGC	360
T36CA-V0	-----A-----	360
T36CA-ori	-----	360
	S107G	
T36FL	TTCGAATCCGTAATGAGGACGGAGTTGAGGTTGGTGGTTAAGGCGGTACTGTCGGATTTA	420
T36CA-V0	-----	420
T36CA-ori	-----	420
T36FL	TCCCGCGCGCATAAACTGGATTTTAGCGAGCGAGCTTTTGC GGCTTATGGTATCCTTTTG	480
T36CA-V0	-----	480
T36CA-ori	-----	480
T36FL	CAAAGGGTACTGTGTCGACCGTTTGC GGTCAGTTTGACATTAATTTAGTCTCTCCATCT	540
T36CA-V0	-----	540
T36CA-ori	-----	540
T36FL	TGCGTGTAG	549
T36CA-V0	-----	549
T36CA-ori	-----	549