

Sequence alignment of the PCR-derived DNA templates used in this study:

HS-DNA	CTCATGTTTGACAGCTTATCGATCCGGGCAACGTTGTTGCCATTGTGCGCA	50
HS-DNA_mut	CTCATGTTTGACAGCTTATCGATCCGGGCAACGTTGTTGCCATTGTGCGCA	50
HS-DNA_long	CTCATGTTTGACAGCTTATCGATCCGGGCAACGTTGTTGCCATTGTGCGCA	50
HS-DNA	GGCGGAGAACTGGTAGGTATGGAAGGATCTATACATTGAATCAATATTGG	100
HS-DNA_mut	GGCGGAGAACTGGTAGGTATGGAAGGATCTATACATTGAATCAATATTGG	100
HS-DNA_long	GGCGGAGAACTGGTAGGTATGGAAGGATCTATACATTGAATCAATATTGG	100
HS-DNA	CCATTAGCCATATTATTCATTGGTTATATATCATAAATCAATATTGGCTA	150
HS-DNA_mut	CCATTAGCCATATTATTCATTGGTTATATATCATAAATCAATATTGGCTA	150
HS-DNA_long	CCATTAGCCATATTATTCATTGGTTATATATCATAAATCAATATTGGCTA	150
HS-DNA	TTGGCCATTGCATACGTTGTATCCATATCATAATATGTACATTTATATTG	200
HS-DNA_mut	TTGGCCATTGCATACGTTGTATCCATATCATAATATGTACATTTATATTG	200
HS-DNA_long	TTGGCCATTGCATACGTTGTATCCATATCATAATATGTACATTTATATTG	200
HS-DNA	GCTCATGTCCAACATTACCGCCATGTTGACATTGATTATTGACTAGTTAT	250
HS-DNA_mut	GCTCATGTCCAACATTACCGCCATGTTGACATTGATTATTGACTAGTTAT	250
HS-DNA_long	GCTCATGTCCAACATTACCGCCATGTTGACATTGATTATTGACTAGTTAT	250
HS-DNA	TAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTT	300
HS-DNA_mut	TAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTT	300
HS-DNA_long	TAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTT	300
HS-DNA	CCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACG	350
HS-DNA_mut	CCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACG	350
HS-DNA_long	CCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACG	350
HS-DNA	ACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCA	400
HS-DNA_mut	ACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCA	400
HS-DNA_long	ACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCA	400
HS-DNA	ATAGGGACTTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGC	450
HS-DNA_mut	ATAGGGACTTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGC	450
HS-DNA_long	ATAGGGACTTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGC	450
HS-DNA	CCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTG	500
HS-DNA_mut	CCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTG	500
HS-DNA_long	CCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTG	500
HS-DNA	ACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACC	550
HS-DNA_mut	ACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACC	550
HS-DNA_long	ACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACC	550
HS-DNA	TTATGGGACTTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCCCTAT	600
HS-DNA_mut	TTATGGGACTTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCCCTAT	600
HS-DNA_long	TTATGGGACTTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCCCTAT	600
HS-DNA	TACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGT	650
HS-DNA_mut	TACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGT	650
HS-DNA_long	TACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGT	650
HS-DNA	TTCACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGT	700
HS-DNA_mut	TTCACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGT	700
HS-DNA_long	TTCACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGT	700
HS-DNA	TTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTC	750
HS-DNA_mut	TTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTC	750
HS-DNA_long	TTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTC	750

HS-DNA	CGCCCCATTGACGCAAATGGGCGGTAGGCGTGACGGTGGGAGGTC	TATA	800
HS-DNA_mut	CGCCCCATTGACGCAAATGGGCGGTAGGCGTGACGGTGGGAGGTC	TAGC	800
HS-DNA_long	CGCCCCATTGACGCAAATGGGCGGTAGGCGTGACGGTGGGAGGTC	TATA	800
HS-DNA	TAGCAGAGCTCGTTTAGTGAACCGTCAGATCTCTAGAAGCTTTAATGCGG		850
HS-DNA_mut	TAGCAGAGCTCGTTTAGTGAACCGTCAGATCTCTAGAAGCTTTAATGCGG		850
HS-DNA_long	TAGCAGAGCTCGTTTAGTGAACCGTCAGATCTCTAGAAGCTTTAATGCGG		850
HS-DNA	TAGTTTATCACAGTTAAATTGCTAACGCAGTCAGGCACCGTGTATGAAAT		900
HS-DNA_mut	TAGTTTATCACAGTTAAATTGCTAACGCAGTCAGGCACCGTGTATGAAAT		900
HS-DNA_long	TAGTTTATCACAGTTAAATTGCTAACGCAGTCAGGCACCGTGTATGAAAT		900
HS-DNA	CTAACAATGCGCTCATCGTCATCCTCGGCACCGTCACCCTGGATGCTCTA		950
HS-DNA_mut	CTAACAATGCGCTCATCGTCATCCTCGGCACCGTCACCCTGGATGCTCTA		950
HS-DNA_long	CTAACAATGCGCTCATCGTCATCCTCGGCACCGTCACCCTGGATGCTCTA		950
HS-DNA	GGCATAGGCTTGTTTATGCCGGTACTGCCGGG.....		982
HS-DNA_mut	GGCATAGGCTTGTTTATGCCGGTACTGCCGGG.....		982
HS-DNA_long	GGCATAGGCTTGTTTATGCCGGTACTGCCGGGACGCAACTGAATGAAATG		1000
HS-DNA			982
HS-DNA_mut			982
HS-DNA_long	GTGAAGGACGGGTCCAGGTGTGGCTGCTTCGGCAGTGCAGCTTGTGAGT		1050
HS-DNA	CCTCTTGCGGGATATCGTCC		1002
HS-DNA_mut	CCTCTTGCGGGATATCGTCC		1002
HS-DNA_long	AGAGTGTGAGCTCCGTAACTAGTCGCGTCGCCTCTTGCGGGATATCGTCC		1100
HS-DNA	ATTCCGACAGCATCGCCAGTCACTATGGCGTGCTGCTAGCGCTATATGCG		1052
HS-DNA_mut	ATTCCGACAGCATCGCCAGTCACTATGGCGTGCTGCTAGCGCTATATGCG		1052
HS-DNA_long	ATTCCGACAGCATCGCCAGTCACTATGGCGTGCTGCTAGCGCTATATGCG		1150
HS-DNA	TTGATGCAATTTCTATGCGCACCCGTTCTCGGAGCACTGTCCGACCGCTT		1102
HS-DNA_mut	TTGATGCAATTTCTATGCGCACCCGTTCTCGGAGCACTGTCCGACCGCTT		1102
HS-DNA_long	TTGATGCAATTTCTATGCGCACCCGTTCTCGGAGCACTGTCCGACCGCTT		1200
HS-DNA	TGGCCGCCGCCCAGTCCTGCTCGCTTCGCTACTTGGAGCCACTATCGACT		1152
HS-DNA_mut	TGGCCGCCGCCCAGTCCTGCTCGCTTCGCTACTTGGAGCCACTATCGACT		1152
HS-DNA_long	TGGCCGCCGCCCAGTCCTGCTCGCTTCGCTACTTGGAGCCACTATCGACT		1250
HS-DNA	ACGCGATCATGGCGACCACACCCGTCCTGT		1182
HS-DNA_mut	ACGCGATCATGGCGACCACACCCGTCCTGT		1182
HS-DNA_long	ACGCGATCATGGCGACCACACCCGTCCTGT		1280

Green: TATA-box

Blue: Mutated TATA box

Yellow: Start of transcription

Red: 98bp nucleotide insert in HS-DNA_long

Pink: Priming site for primer extension