Supplement Materials

Scheme S1. Minimal CMVwt sequence.

ACGCGTCGAGGTAGGCGTGTACGGTGGGAGGCCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGC
CTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCTGGTACCATG
GAAGACGCCAAAAACATAAAGAAAGGCCCGGCGCCATTCTATCCGCTGGAAGATGGAACCGCTGGAGAGC
AACTGCATAAGGCTATGAAGAGATACGCCCTGGTTCCTGGAACAATTGCTTTTACAGATGCACATATCGAGG
TGGACATCACTTACGCTGAGTACTTCGAAATGTCCGTTCGGTTGGCAGAAGCTATGAAACGATATGGGCTGA
ATACAAATCACAGAATCGTCGTATGCAGTGAAAACTCTCTTCAATTCTTTATGCCGGTGTTGGGCGCGTTATT
TATCGGAGTTGCAGTTGCGCCCGCGAACGACATTTATAATGAACGTGAATTGCTCAACAGTATGGGCATTTC
GCAGCCTACCGTGGTGTTCGTTTCCAAAAAGGGGTTGCAAAAAATTTTGAACGTGCAAAAAAAGCTCCCAAT
CATCCAAAAAATTATTATCATGGATTCTAAAACGGATTACCAGGGATTTCAGTCGATGTACACGTTCGTCAC
ATCTCATCTACCTCCCGGTTTTAATGAATACGATTTTGTGCCAGAGTCCTTCGATAGGGACAAGACAATTGCA
CTGATCATGAACTCCTCTGGATCTACTGGTCTGCCTAAAGGTGTCGCTCTGCCTCATAGAACTGCCTGCGTGA
GATTCTCGCATGCCAGAGATCCTATTTTTGGCAATCAAATCATTCCGGATACTGCGATTTTAAGTGTTGTTCCA
TTCCATCACGGTTTTGGAATGTTTACTACACTCGGATATTTGATATGTGGATTTCGAGTCGTCTTAATGTATAG
ATTTGAAGAAGAGCTGTTTCTGAGGAGCCTTCAGGATTACAAGATTCAAAGTGCGCTGCTGGTGCCAACCCT
ATTCTCCTTCTTCGCCAAAAGCACTCTGATTGACAAATACGATTTATCTAATTTACACGAAATTGCTTCTGGTG
GCGCTCCCCTCTCTAAGGAAGTCGGGGAAGCGGTTGCCAAGAGGTTCCATCTGCCAGGTATCAGGCAAGGA
TATGGGCTCACTGAGACTACATCAGCTATTCTGATTACACCCGAGGGGGATGATAAACCGGGCGCGGTCGGT
AAAGTTGTTCCATTTTTTGAAGCGAAGGTTGTGGATCTGGATACCGGGAAAACGCTGGGCGTTAATCAAAGA
GGCGAACTGTGTGTGAGAGGTCCTATGATTATGTCCGGTTATGTAAACAATCCGGAAGCGACCAACGCCTTG
ATTGACAAGGATGGATGGCTACATTCTGGAGACATAGCTTACTGGGACGAAGACGAACACTTCTTCATCGTT
GACCGCCTGAAGTCTCTGATTAAGTACAAAGGCTATCAGGTGGCTCCCGCTGAATTGGAATCCATCTTGCTC
CAACACCCCAACATCTTCGACGCAGGTGTCGCAGGTCTTCCCGACGATGACGCCGGTGAACTTCCCGCCGCC
GTTGTTGTTTTGGAGCACGGAAAGACGATGACGGAAAAAGAGATCGTGGATTACGTCGCCAGTCAAGTAAC
AACCGCGAAAAAGTTGCGCGGAGGAGTTGTGTTTGTGGACGAAGTACCGAAAGGTCTTACCGGAAAACTCG
ACGCAAGAAAAATCAGAGAGATCCTCATAAAGGCCAAGAAGGGCGGAAAGATCGCCGTGTAAT

Color codes: yellow, restriction sites for MluI (left) and NcoI (right) used in ligation and cloning; green, OA putative OA binding sites; gray, *Luc* CDS.

Scheme S2. Minimal CMVmut sequence.

ACGCGTCGAGGTAGACGTGTACGGTGGGAGACCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCACC
TGGAGACACCATCCACGCTGTTTTGACCTCCATAGAAGACACCAGGACCGATCCAGCCTCCTGGTACCATG
GAAGACGCCAAAAACATAAAGAAAGGCCCGGCGCCATTCTATCCGCTGGAAGATGGAACCGCTGGAGAGC
AACTGCATAAGGCTATGAAGAGATACGCCCTGGTTCCTGGAACAATTGCTTTTACAGATGCACATATCGAGG
TGGACATCACTTACGCTGAGTACTTCGAAATGTCCGTTCGGTTGGCAGAAGCTATGAAACGATATGGGCTGA
ATACAAATCACAGAATCGTCGTATGCAGTGAAAACTCTCTTCAATTCTTTATGCCGGTGTTGGGCGCGTTATT
TATCGGAGTTGCAGTTGCGCCCGCGAACGACATTTATAATGAACGTGAATTGCTCAACAGTATGGGCATTTC
GCAGCCTACCGTGGTGTTCGTTTCCAAAAAGGGGTTGCAAAAAATTTTGAACGTGCAAAAAAAGCTCCCAAT
CATCCAAAAAATTATTATCATGGATTCTAAAACGGATTACCAGGGATTTCAGTCGATGTACACGTTCGTCAC
ATCTCATCTACCTCCCGGTTTTAATGAATACGATTTTGTGCCAGAGTCCTTCGATAGGGACAAGACAATTGCA
CTGATCATGAACTCCTCTGGATCTACTGGTCTGCCTAAAGGTGTCGCTCTGCCTCATAGAACTGCCTGCGTGA
GATTCTCGCATGCCAGAGATCCTATTTTTGGCAATCAAATCATTCCGGATACTGCGATTTTAAGTGTTGTTCCA
TTCCATCACGGTTTTGGAATGTTTACTACACTCGGATATTTGATATGTGGATTTCGAGTCGTCTTAATGTATAG
ATTTGAAGAAGAGCTGTTTCTGAGGAGCCTTCAGGATTACAAGATTCAAAGTGCGCTGCTGGTGCCAACCCT
ATTCTCCTTCTTCGCCAAAAGCACTCTGATTGACAAATACGATTTATCTAATTTACACGAAATTGCTTCTGGTG
GCGCTCCCCTCTCTAAGGAAGTCGGGGAAGCGGTTGCCAAGAGGTTCCATCTGCCAGGTATCAGGCAAGGA
TATGGGCTCACTGAGACTACATCAGCTATTCTGATTACACCCGAGGGGGATGATAAACCGGGCGCGGTCGGT
AAAGTTGTTCCATTTTTTGAAGCGAAGGTTGTGGATCTGGATACCGGGAAAACGCTGGGCGTTAATCAAAGA
GGCGAACTGTGTGTGAGAGGTCCTATGATTATGTCCGGTTATGTAAACAATCCGGAAGCGACCAACGCCTTG
ATTGACAAGGATGGATGGCTACATTCTGGAGACATAGCTTACTGGGACGAAGACGAACACTTCTTCATCGTT
GACCGCCTGAAGTCTCTGATTAAGTACAAAGGCTATCAGGTGGCTCCCGCTGAATTGGAATCCATCTTGCTC
CAACACCCCAACATCTTCGACGCAGGTGTCGCAGGTCTTCCCGACGATGACGCCGGTGAACTTCCCGCCGCC
GTTGTTGTTTTGGAGCACGGAAAGACGATGACGGAAAAAGAGATCGTGGATTACGTCGCCAGTCAAGTAAC
AACCGCGAAAAAGTTGCGCGGAGGAGTTGTGTTTGTGGACGAAGTACCGAAAGGTCTTACCGGAAAACTCG
ACGCAAGAAAAATCAGAGAGATCCTCATAAAGGCCAAGAAGGGCGGAAAGATCGCCGTGTAAT

Color codes: yellow, green and gray as in Scheme S1; red, sites of single nucleotide mutation G to A.

Table S1. Primers used for qRT-PCR and ChIP.

Sequence	Name	Method
For ACTGGAGACAAAGTGGGAGCC Rev CAGACACTGGCAACATTGCG	RPLP0_mRNA	qRT-PCR
For CACCGAGTCGTAGTCGAGGT Rev TTTCGGGTAGTGGAAAACCA	Myc_mRNA	qRT-PCR
For CGAGGTAGGCGTGTACGGTG Rev CAGGAGGCTGGATCGGTCC	Luc_promoter	qRT-PCR /ChIP
For GCACATATCGAGGTGGACATCA Rev TCAGCCCATATCGTTTCATAGC	Luc+0.2	qRT-PCR /ChIP
For TCAACAGTATGGGCATTTCGC Rev GTGACGAACGTGTACATCGACTG	Luc+0.4	qRT-PCR /ChIP
For CAACCCTATTCTCCTTCTTCGC Rev GATACCTGGCAGATGGAACCTC	Luc+1	qRT-PCR /ChIP
For TTCTCAGAGGCTTGGCGGGA Rev GCAGCTCTGCTCGCCCG	MYC(h)_ChIP+0.1	ChIP
For TGGAGAGGGAAGGTTGGGAG Rev TGAAGGAGAAGGCGAGAGGC	Myc_ChIP+1.5	ChIP
For CGAGGAGAATGTCAAGAGGCG Rev GGACAGGATGTATGCTGTGGC	Myc_ChIP+4.85	ChIP
For CTGCTTGCCGCCCTCTTTGG Rev CACAGCCAGACGGACAATGAG	SLC38A2_mRNA	qRT-PCR
For CGTATCCGCATCCACATCCAC Rev TGCTCGTCCCACTTCCTCAAG	PHLDA1_mRNA	qRT-PCR
For TCATACTCGGGCAAGGCAGC Rev GAGGCAGCGAACCAGACAGC	TRIB3_mRNA	qRT-PCR
For CAGTCGTCCTTGCTGGATGTG Rev CCAGGAGAAACTGCCACAGC	ETS2_mRNA	qRT-PCR
For TTAACCACAACCCCGACGC Rev CCCGTGTTTTCCTGCCGTAA	LHX2_mRNA	qRT-PCR
For GAGCTTTTGGTGTCCTTGGGT Rev CTCTCTGGCAGCATCTGAAGG	NFkBIA_mRNA	qRT-PCR
For TGAGCCGCGACTGTGATG Rev GTCTCGGTGACAAAGTCGAAGTT	P21_mRNA	qRT-PCR/ ChIP
For AAAACTCGACGCAGAGCTGTG Rev AGGTGAGAAGCAGGTTGTGGAC	ARL6IP1_mRNA	qRT-PCR
For GGCTTCCACACAACTCCAGTG Rev CCGCTGTAGGTTTCATGGTGG	TMEM123_mRNA	qRT-PCR
For CGGTGGTCTCTATTCTCACGCAG Rev TTCCCTTGACACGGCGGACG	SLC38A2_ChIP_TSS	ChIP
For CTTCAATGTTCGTTAATGCCTGG Rev GCACAGAATGGTGACACATGCG	SLC38A2_ChIP_CDS	ChIP
For GCAGCCGCTACTCTCCAGCATC Rev TCTGCCTCCTGCGTGTTAGCC	PHLDA1_ChIP_TSS	ChIP
For GAGGCTGAGACAGGAGAATGGC Rev GGCTCCCTCTTGGTGGCTGG	PHLDA1_ChIP_CDS	ChIP
For GTGTTACACGCACGCACGCC Rev CCGCACGCCCTCCTCTAGG	TRIB3_ChIP_TSS	ChIP
For GAAGCGGTTGGAGTTGGATGAC Rev CGGGCTCCAGGAGGACATAGG	TRIB3_ChIP_CDS	ChIP
For GCGATCAGCACCACGACTCG	ETS2_ChIP_TSS	ChIP

Rev GTGGCACCGAAGGGCAGCCG		
For GCCGTCCGATTGTTCTGTTCC Rev TGCTGCCTGGGAAGTCCTGACT	ETS2_ChIP_CDS	ChIP
For GGAGAAACCCCTACTCCAGTCG Rev GTTCACCCTGAAGCCGCTAGG	LHX2_ChIP_TSS	ChIP
For GCCTCGGAGATGGTGATGCG Rev CGGCATGGTTGAAGTGTGCG	LHX2_ChIP_CDS	ChIP
For CAGAGGACGAAGCCAGTTCTC Rev GCCCTATAAACGCTGGCTGG	NFkBIA_ChIP_TSS	ChIP
For CTCTTCCCCACAGGTTCCTG Rev GCAGGTTGTTCTGGAAGTTGAG	NFkBIA_ChIP_CDS	ChIP
For TAGCCCAGATTCCCTCTCCG Rev GCTCCAAGATGCTTTTCCTCAC	P21_ChIP_TSS	ChIP
For GGGGACAGGCAGCCAGGAC Rev CTCGGGTTGTGGTTGGTGTG	ARL6IP1_ChIP_TSS	ChIP
For CGGACAGAACAGATGGATCTAGA Rev CTCTGAGAGGCGGTGAATAGTTA	ARL6IP1_ChIP_CDS	ChIP
For GCAGCCACTTACCCGCCATG Rev CGAAGGGGAAGCGGAGCCG	TMEM123_ChIP_TSS	ChIP
For GGCACTAGGGCAGGTTATTGG Rev CTGGGCTTCCACACAACTCC	TMEM123_ChIP_CDS	ChIP