Table S1. The list of all plasmids constructed or used in this study

Plasmid	Characteristics	Oligos used to amplify the insert
For PAN expression		
pJM1	Ap^r; pcDNA 3 (Invitrogen) with a KpnI-XhoI insert of 1076 bp, corresponding to PAN wt	oJM1 and oJM2
pJM2	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 998 bp, corresponding to PAN carrying the mutation Δ1 (deletion of 28667 to 28745)	oJM5 and oJM2
pJM3	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 998 bp, corresponding to PAN carrying the mutation Δ3b (deletion of 29634 to 29742)	oJM1 and oJM3
pJM4	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 866 bp, corresponding to PAN carrying mutation the Δ3 (deletion of 29553 to 29742)	oJM1 and oJM4
pJM7	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 889 bp, corresponding to PAN carrying the mutation Δ1 and 3b	oJM5 and oJM3
pJM8	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 973 bp, corresponding to PAN carrying the mutation ΔMREa (28667 to 28692)	oJM16 and oJM2
pJM10	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 938 bp, corresponding to PAN carrying the mutation ΔMREc (deletion of 28667 to 28727)	oJM18 and oJM2
pJM11	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 1013 bp, corresponding to PAN carrying the point mutations (KSHV 28704-28712 TATGGATTT to CTGCACGTC)	oJM19 and pJM2
pJM17	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 1025 bp, corresponding to PAN carrying the mutation ΔMRE-d (internal deletion of the MRE-II)	oJM25 and oJM2
pJM53	Ap^r; CMV promoter was excised from pcDNA 3 by PAN Promoter + PAN (2092 bp) at MluI-XhoI site	PAN promoter + PAN insert was amplified using oJM79 and oJM2 as primers
pJM54	Ap^r; pJM53 with PAN carrying the point mutations (KSHV 28704-28712 TATGGATTT to CTGCACGTC)	Mutation created by amplifying two fragments using two oligo pairs: oJM83/oJM2 and oJM84/oJM79. Fragment overlapped using oJM2/oJM79
pJM55	Ap^r; pcDNA 3 with a KpnI-XhoI insert of 950 bp, corresponding to PANΔ2 carrying an internal deletion from 29019-29068	Mutation created by amplifying two fragments using two oligo pairs: oJM82/oJM1 and oJM81/oJM2. Fragment overlapped using oJM1/oJM2
For K5 expression		
pJM5	Ap^r; pcDNA 3 with a HindIII-XhoI insert of 803 bp, corresponding to wt K5	oJM9 and oJM10
For vGPCR expression		
pJM6	Ap^r; pcDNA 3 with a HindIII-XhoI insert of 1061 bp, corresponding to wt vGPCR	oJM12 and oJM13
pJM12	Ap^r; pJM6 plus an insert in the 5' HindIII site corresponding to PAN MRE-II, in antisense orientation upstream	MRE-II insert was generated by annealing oligos oJM20/oJM21
pJM13	Ap^r; pJM6 plus an insert in the 5' HindIII site corresponding to PAN MRE-II, sense	MRE-II insert was generated by annealing oligos oJM20/oJM21
pJM18	Ap^r; pJM6 plus an insert in the 5' HindIII site corresponding to PAN-MRE, sense	PAN MRE element was amplified using oligo pair oJM23/oJM24

For Luciferase and Renilla expression		
pMIR-REPORT-Luciferase	Ap^r; for luciferase expression, purchased from Applied Biosystems.	
pRL-TS	For Renilla expression, original from reference 40	
pJM19	Ap^r; pMIR-REPORT-Luciferase plus an insert corresponding to the entire PAN MRE element, cloned upstream of Luciferase using the plasmid's BamHI site	PAN MRE element was amplified using oligo pair oJM28/oJM29
pJM43	Ap^r; pMIR-REPORT-Luciferase plus an insert corresponding to ENE element cloned in the HindIII site at the 3' of Luciferase ORF	PAN ENE element was amplified using oligo pair oJM66/oJM67
pJM44	Ap^r; pJM19 with an ENE element in the HindIII site at the 3' if Luciferase ORF	The same oligo sets for pJM19 and pJM 43 were used for the insertions
psiCHECK2,	Apr; for dual Renilla and Luciferase expression, purchased from Promega	
pJM47	Ap^r; psiCHECK2 plus an insert corresponding to the entire PAN MRE element, cloned upstream of *Renilla* using plasmid's XbaI site.	PAN MRE element was amplified using oligo pair oJM69/oJM70
pJM48	Ap^r; psiCHECK2 plus PAN MRE element, cloned in XbaI site upstream of *Renilla* in reverse or antisense orientation	PAN MRE element was amplified using oligo pair oJM69/oJM70
pJM49	Ap^r; psiCHECK2 plus an insert corresponding to ENE element cloned in the XhoI site downstream of *Renilla* ORF	PAN ENE element was amplified using oligo pair oJM71 and oJM72
pJM50	Ap^r; psiCHECK2 plus PAN ENE element, cloned in XhoI site downstream of *Renilla* in reverse or antisense orientation	PAN ENE element was amplified using oligo pair oJM71/oJM72

Characteristics include antibiotics resistance (Apr, ampicillin resistant), parent vectors, cloned inserts and brief cloning strategies. DNA oligo names and nt positions in the KSHV genome are provided for the construction of the specified plasmid.

Table S2. The list of oligos used in this study

Oligo name	Position	Features*	Sequence (5' to 3')
oJM1	KSHV PAN nt 28667-28683	F with Asp718	AGTCGGGTACC/ACTGGGACTGCCCAGTC
oJM2	KSHV PAN nt 29742-29720	B with XhoI	AGTCCGCTCGAG/ATGGATTAAACATTGACCTTTAT
oJM3	KSHV PAN nt 29634-29612	B with XhoI	AGTCCGCTCGAG/CCAATATACACTGGGATAAAAAC
oJM4	KSHV PAN nt 29553-29531	B with XhoI	AGTCCGCTCGAG/CCGTTATCATTGTTACACAACGC
oJM5	KSHV PAN nt 28745-28762	F with Asp718	AGTCGGGTACC/GTTTTCATTGGTGCCGCC
oJM7	KSHV PAN nt 29542-29520	B	GTTACACAACGCTTTCACCTACA
oJM9	KSHV K5 nt 25701-25720	B with XhoI	AGTCCGCTCGAG/CCAAGTGGTTGTTCAACCGT
oJM10	KSHV K5 nt 26489-26472	F with HindIII	ATCGTAAGCTT/GCAGAGATGGCGTCTAAG
oJM12	KSHV vGPCR nt 129345-129369	F with HindIII	ATCGTAAGCTT/CACCTATACTACTTGTTATTGTAGG
oJM13	KSHV vGPCR nt 130405-130389	B with XhoI	AGTCCGCTCGA/GCGGGCTACGTGGTGGC
oJM16	KSHV PAN nt 28692-28714	F with Asp718	AGTCGGGTACC/TGCCGCTTCACCTATGGATTTTG
oJM18	KSHV PAN nt 28727-28746	F with Asp718	AGTCGGGTACC/GCCTTCTTGCCGCTTCTGGT
oJM19	KSHV PAN nt 28692-28729	F with Asp718	AGTCGGGTACC/TGCCGCTTCACCCTGCACGTCTGTGCTCGCTGCTTGCC
oJM20	KSHV PAN nt 28689-28729	F with HindIII	AGCTT/GGCTGCCGCTTCACCTATGGATTTTGTGCTCGCTGCTTGCC/A
oJM21	KSHV PAN nt 28729-28689	B with HindIII	AGCTT/GGCAAGCAGCGAGCACAAAATCCATAGGTGAAGCGGCAGCC/A
oJM23	KSHV PAN nt 28667-28684	F with HindIII	ATACCCAAGCTT/ACTGGGACTGCCCAGTCA
oJM24	KSHV PAN nt 28750-28732	B with HindIII	ATACCCAAGCTT/GAAAACCAGAAGCGGCAAG
oJM25	KSHV PAN nt 28667-28691/nt 28272-28744	F with Asp718	AGTCGGGTACC/ACTGGGACTGCCCAGTCACCTTGGC/GCCTTCTTGCC GCTTCTG
oJM28	KSHV PAN nt 28667-28683	F with BamHI	TACTCAGGATCC/ACTGGGACTGCCCAGTC
oJM29	KSHV PAN nt 28750-28732	B with BamHI	TACTCAGGATCC/GAAAACCAGAAGCGGCAAG
oJM32	KSHV PAN nt 28698-28709	RNA oligomer	Biotin-GGCUGCCGCUUCACCUAUGGA
oJM33	KSHV PAN nt 28709-28729	RNA oligomer	Biotin-AUUUUGUGCUCGCUGCUUGCC
oJM34	KSHV PAN nt 28729-28750	RNA oligomer	Biotin-CUUCUUGCCGCUUCUGGUUUUC
oJM35	KSHV PAN nt 28697-28720	RNA oligomer	Biotin-CUUCACCUAUGGAUUUUGUGCUCG
oJM66	KSHV PAN nt 29530-29554	F with HindIII	ATACCCAAGCTT/AGCGTTGTGTAACAATGATAACGGT
oJM67	KSHV PAN nt 29666-29641	B with HindIII	TGCATGAAGCTT/ACGTTAAATTGTCAAAAGTATAACAT
oJM68	KSHV PAN nt 28697-28720	RNA oligomer	Biotin-CUUCACCCUGCACGUCUGUGCUCG
oJM69	KSHV PAN nt 28667-28685	F with XbaI	ATGCTCTAGA/ACTGGGACTGCCCAGTCAC
oJM70	KSHV PAN nt 28750-28732	B with XbaI	ATGATCTAGA/GAAAACCAGAAGCGGCAAG
oJM71	KSHV PAN nt 29530-29554	F with XhoI	TCAATACTCGAG/AGCGTTGTGTAACAATGATAACGGT
oJM72	KSHV PAN nt 29666-29641	B with XhoI	TACATGCTCGAG/ACGTTAAATTGTCAAAAGTATAACAT
oJM79	KSHV PAN nt 27650-27673	F with MluI	GCAGCACGCGT/AAGGTGTGAGGGTTTCTAAGAAAC
oJM81	KSHV PAN nt 29006-29018/29069-29089	F	CCTTTTATGATAT/AGCGCCCACTGGTGTATCAGA
oJM82	KSHV PAN nt 29083-29069/29018-28996	B	ACACCAGTGGGCGCT/ATATCATAAAAGGGGGCTACAAC
oJM83	KSHV PAN nt 28692-28729	F	TGCCGCTTCACCCTGCACGTCTGTGCTCGCTGCTTGCC
oJM84	KSHV PAN nt 28722-28684	B	AGCGAGCACAGACGTGCAGGGTGAAGCGGCAGCCAAGGT
oST197	Human U6	B	AAAATATGGAACGCTTCACGA
oVM11	KSHV ORF57 nt 82296-82277	B	CTCGTCTTCCAGTGTCGGTG
oVM52	KSHV PAN nt 29400-29419	F	CTAAAGTGGTGTGCGGCAGC
oZMZ243	T7 Promoter	B	CTATAGTGAGTCGTATTAAT
oZMZ270	Human GAPDH, NM_002046	B	TGAGTCCTTCCACGATACCAAA
PAN P	KSHV PAN nt 29181-29205	F, TaqMan	56-FAM/TTGAGTGTAAATCGGGCCACTTTGC/3IABkFG
PAN 1	KSHV PAN nt 29122-29143	F, TaqMan	GTTTCGGTTCTGTGTTTGTCTG
PAN 2	KSHV PAN nt 29249-29227	B, TaqMan	CACAACGCACCAATAAGATACAC

* F, forward; B, backward

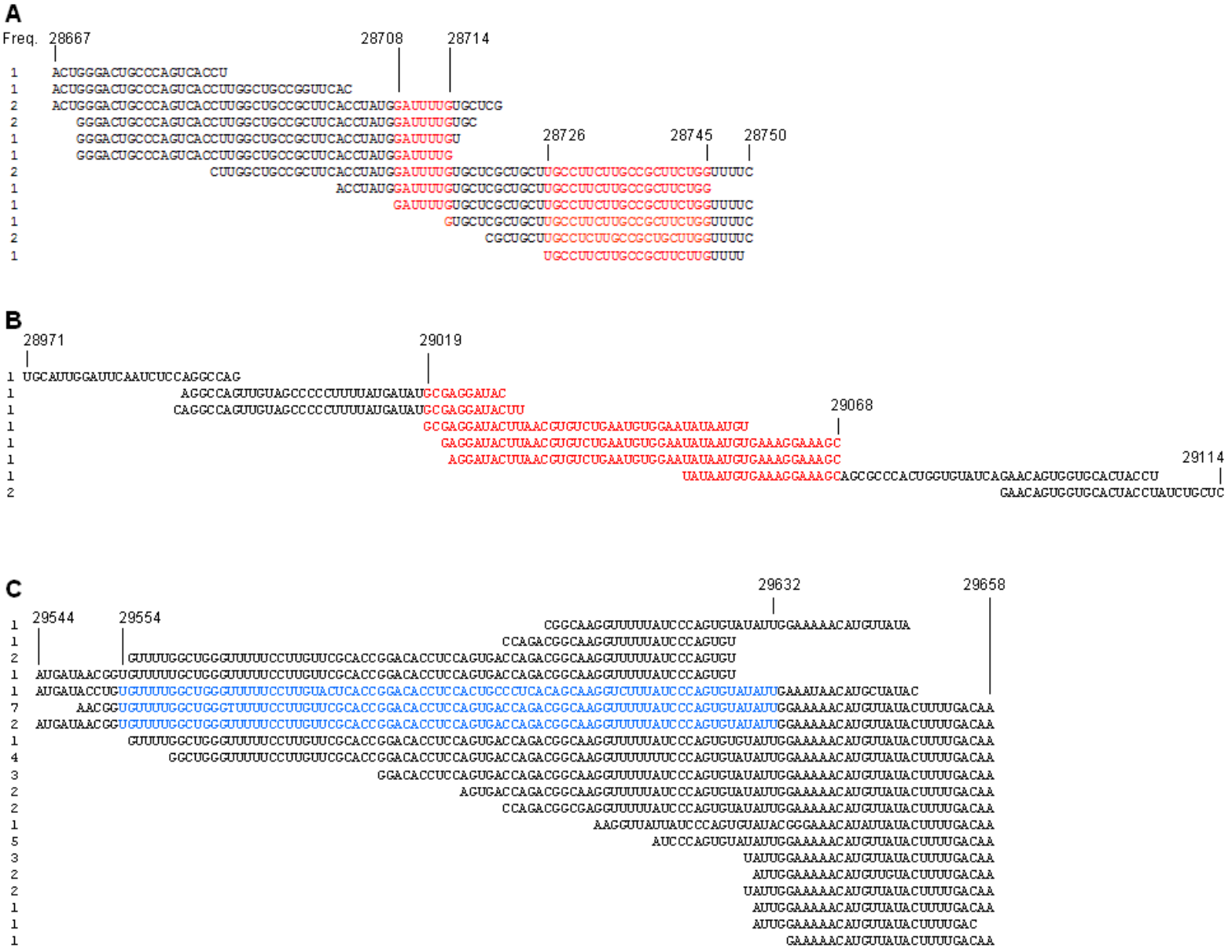

Fig. S1. Alignments of the CLIP sequences to PAN in ORF57 CLIP assays. (A) The CLIP sequence tags clustered in the 5' PAN. (B) The CLIP sequence tags clustered in an internal region of PAN. (C) The CLIP sequence tags in the 3' PAN. The 79-nt ENE (29554-29632) is highlighted in blue. Numbers on the left of (A), (B) and (C) are sequence tag frequency in ORF57 CLIP assays. The nts in red color are highly conserved nts among the identified sequence tags.