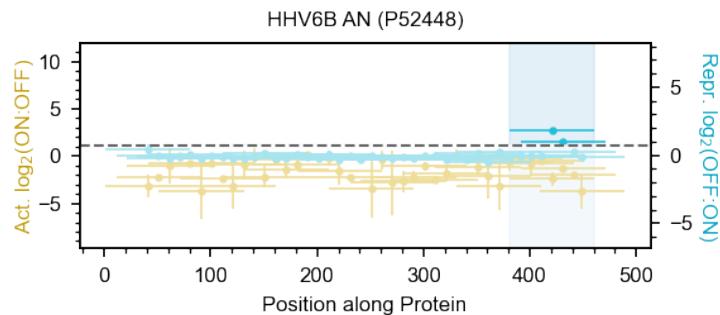


HHV6B AN (P52448)

Gene: U70 ; Protein Family: AN



Extended repression domain from residues 381 to 470:

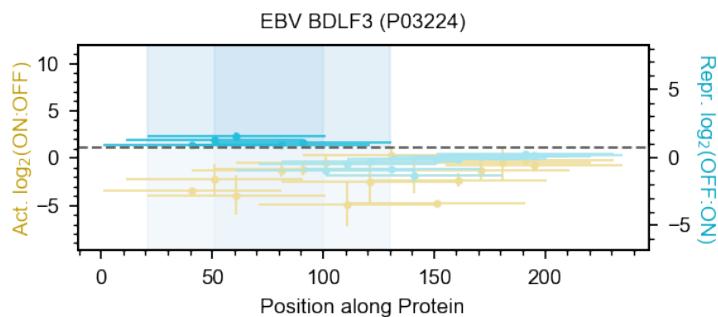
INDHSNPEYIESTEVPSVHVTALFRRRTEEERSLHLVIDETEYIEEEIPLALIVTPVAPNPEFTCRVITDICNLWENNICKQTSQVWA

Max tile of repression domain from residues 381 to 460 (estimated 34.9% to 41.3% of cells repressed):

INDHSNPEYIESTEVPSVHVTALFRRRTEEERSLHLVIDETEYIEEEIPLALIVTPVAPNPEFTCRVITDICNLWENNI

EBV BDLF3 (P03224)

Gene: BDLF3 ; Protein Family: BDLF3



Extended repression domain from residues 1 to 100:

MAHARDKAGAVMAMILICETSLIWTSSGSSTASAGNVGTAVTTPSPSASGPSTNQSTLTTTSAPITTAILSTNTTTVTFTGTTVTPVPTTSNASTI

Max tile of repression domain from residues 21 to 100 (estimated 24.9% to 39.8% of cells repressed):

SLIWTSSGSSTASAGNVGTAVTTPSPSASGPSTNQSTLTTTSAPITTAILSTNTTTVTFTGTTVTPVPTTSNASTI

Extended repression domain from residues 41 to 130:

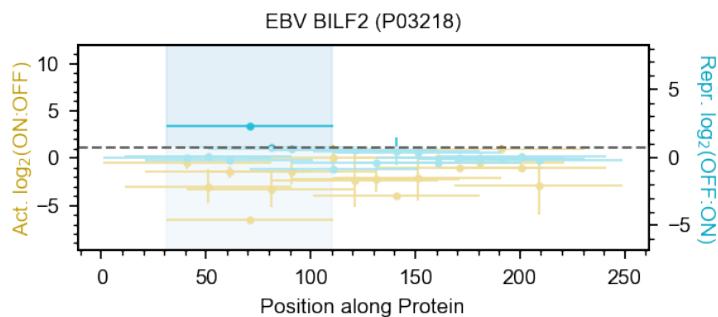
TAVTTPSPSASGPSTNQSTLTTTSAPITTAILSTNTTTVTFTGTTVTPVPTTSNASTINVTTKVTAAQNITATEAGTGTSTGVTSNVTT

Max tile of repression domain from residues 51 to 130 (estimated 18.3% to 24.4% of cells repressed):

SGPSTNQSTLTTTSAPITTAILSTNTTTVTFTGTTVTPVPTTSNASTINVTTKVTAAQNITATEAGTGTSTGVTSNVTT

EBV BILF2 (P03218)

Gene: BILF2 ; Protein Family: BILF2



Extended repression domain from residues 31 to 120:

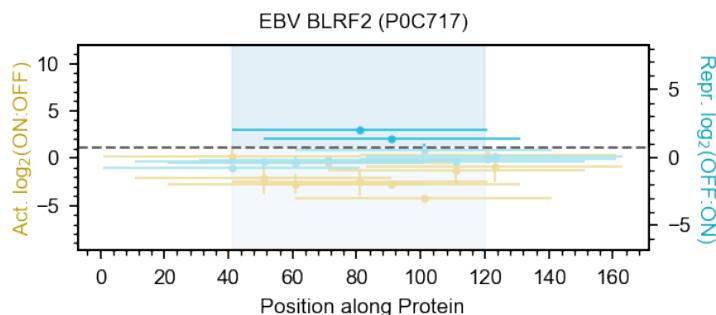
HAGARVNLTCSVPSNESVSRIELGRGYTPGDGQLPLAVATSNNGTHITNGGYNYSLTLEWVNDNSNTSVSLIIPNVTLAHAGYYTCNVTLR

Max tile of repression domain from residues 31 to 110 (estimated 50.3% to 54.2% of cells repressed):

HAGARVNLTCSVPSNESVSRIELGRGYTPGDGQLPLAVATSNNGTHITNGGYNYSLTLEWVNDNSNTSVSLIIPNVTLAHA

EBV BLRF2 (P0C717)

Gene: BLRF2 ; Protein Family: BLRF2



Extended repression domain from residues 41 to 130:

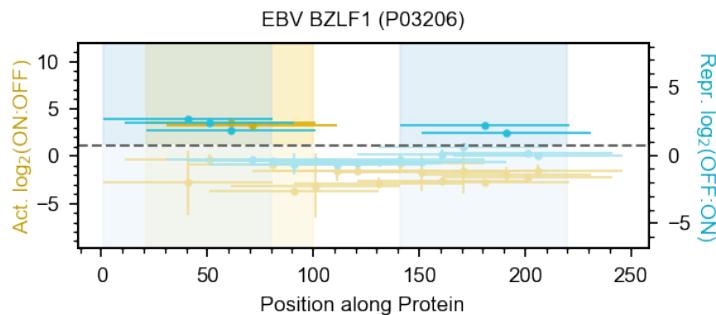
LRGGACASSTSVP SAPV PPP EPLT ARQ REV M IT QAT GRL ASQ AM KK IED KVR KS VD G VT TR NEM EN IL QNL TL RI Q VS ML GAK G Q P SP GE

Max tile of repression domain from residues 41 to 120 (estimated 41.3% to 44.7% of cells repressed):

LRGGACASSTSVP SAPV PPP EPLT ARQ REV M IT QAT GRL ASQ AM KK IED KVR KS VD G VT TR NEM EN IL QNL TL RI Q VS ML

## EBV BZLF1 (P03206)

Gene: BZLF1 ; Protein Family: BZLF1

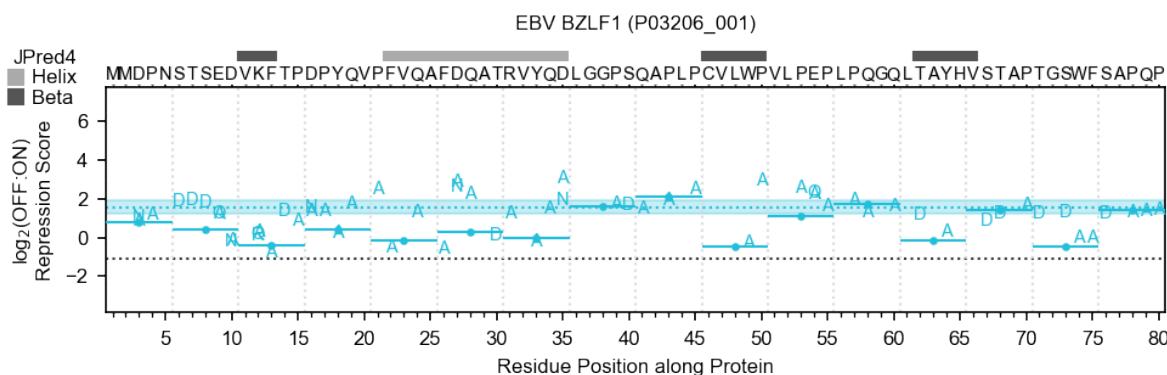


Extended repression domain from residues 1 to 100:

MMDPNSTSEDVKFTPDPYQVPFVQAFDQATRVYQDLGGPSQAPLPCVLWPVLPEPLPQGQLTAYHVSTAPTSWFSAPQPAPENAYQAYAAPQLFPV  
SDI

Max tile of repression domain from residues 1 to 80 (estimated 60.3% to 62.5% of cells repressed):

MMDPNSTSEDVKFTPDPYQVPFVQAFDQATRVYQDLGGPSQAPLPCVLWPVLPEPLPQGQLTAYHVSTAPTSWFSAPQP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_rev	6	14	STSEDVKFT	No	-	-	

Extended activation domain from residues 21 to 110:

PFVQAFDQATRVYQDLGGPSQAPLPCVLWPVLPEPLPQGQLTAYHVSTAPTSWFSAPQPAPENAYQAYAAPQLFPVSDITQNQQTNQAG

Max tile of activation domain from residues 21 to 100 (estimated 10.6% to 13.5% of cells activated):

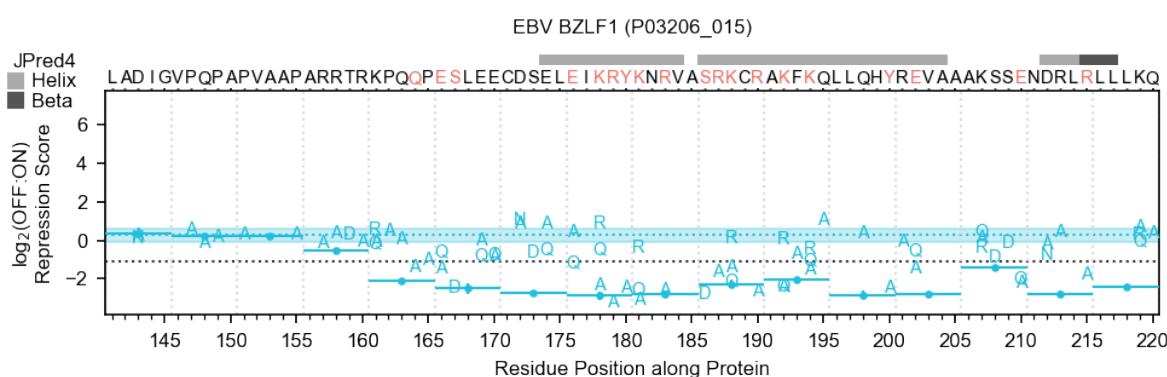
PFVQAFDQATRVYQDLGGPSQAPLPCVLWPVLPEPLPQGQLTAYHVSTAPTSWFSAPQPAPENAYQAYAAPQLFPVSDI

Extended repression domain from residues 141 to 230:

LADIGVPQPAPVAAPARRTRKPQQPESLEECDSL EIKRYKNRVASRKCRAFKQLLQHYREVAAKSSENDRLRLLKQMCPSDLVDSI

Max tile of repression domain from residues 141 to 220 (estimated 42.3% to 55.6% of cells repressed):

LADIGVPQPAPVAAPARRTRKPQQPESLEECDSL EIKRYKNRVASRKCRAFKQLLQHYREVAAKSSENDRLRLLKQ



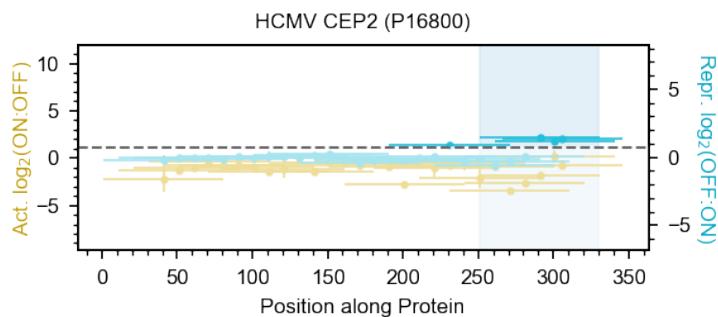
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
CtBP_expanded	165	169	PESLE	Yes	161	220	KPQQPESLEECDSELEIKRYK NRVASRKCRAFKQQLQHYR EVAAAKSSENDRLRLLLKQ
flexi_NRBOX	192	198	KFKQLLQ	Yes	161	220	KPQQPESLEECDSELEIKRYK NRVASRKCRAFKQQLQHYR EVAAAKSSENDRLRLLLKQ
LIG_NRBOX	213	219	RLRLLLK	Yes	161	220	KPQQPESLEECDSELEIKRYK NRVASRKCRAFKQQLQHYR EVAAAKSSENDRLRLLLKQ

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HCMV CEP2 (P16800)

Gene: UL94 ; Protein Family: CEP2



Extended repression domain from residues 251 to 345:

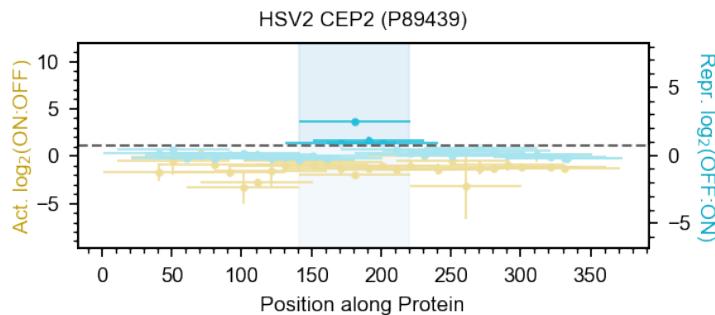
LCYVPCGPMTQSLIHNEEPATFFCESDDAKYLCAVGSKTAAQVTLDGLDYHIGVKDSEGRWLPVKTDVWDLVKVEEPVSRMIVCSCPVLKNLVH

Max tile of repression domain from residues 251 to 330 (estimated 26.6% to 30.5% of cells repressed):

LCYVPCGPMTQSLIHNEEPATFFCESDDAKYLCAVGSKTAAQVTLDGLDYHIGVKDSEGRWLPVKTDVWDLVKVEEPVS

## HSV2 CEP2 (P89439)

Gene: UL16 ; Protein Family: CEP2

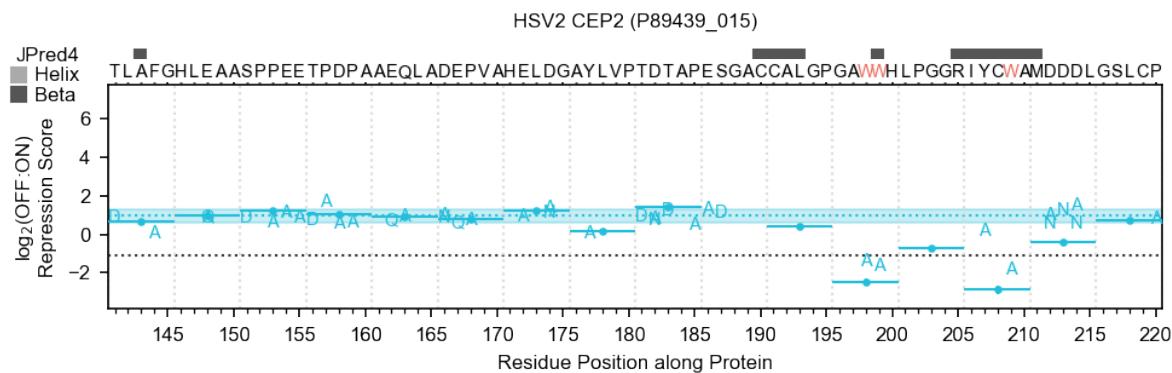


Extended repression domain from residues 131 to 240:

VTHPRTPLLCTLAFGHLEAAPPEETPDPAEQLADEPVAHELDGAYLVPTDTAPESGACCALGPGAWWHLPGGRIYCWA  
MDDDLGSLCPGSRARHL  
GWLLSRITDPPG

Max tile of repression domain from residues 141 to 220 (estimated 56.5% to 56.7% of cells repressed):

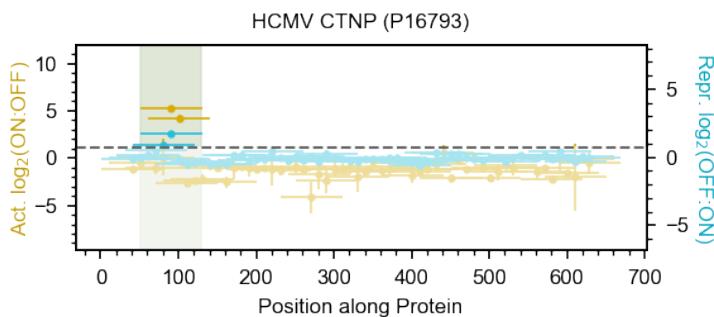
TLAFGHLEAAPPEETPDPAEQLADEPVAHELDGAYLVPTDTAPESGACCALGPGAWWHLPGGRIYCWA  
MDDDLGSLCP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
Sin3A_SID	160	164	AAEQL	No	-	-	
	-	-		No	196	200	GAWWH
	-	-		No	206	210	IYCWA

HCMV CTNP (P16793)

Gene: UL52 ; Protein Family: CTNP



Extended repression domain from residues 41 to 130:

LCSPQRQAVSRYSGWSTEYTQWHSDLTTELLWAHPRQVPMDEALAAAAAASYQVNPQHPANRYRHYEFQTLSLGTSEVDELLNCCAEET

Max tile of repression domain from residues 51 to 130 (estimated 35.3% to 39.0% of cells repressed):

RYSGWSTEYTQWHSDLTTELLWAHPRQVPMDEALAAAAAASYQVNPQHPANRYRHYEFQTLSLGTSEVDELLNCCAEET

Extended activation domain from residues 51 to 140:

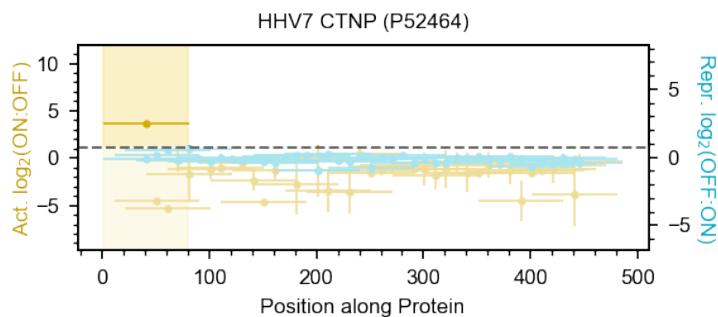
RYSGWSTEYTQWHSDLTTELLWAHPRQVPMDEALAAAAAASYQVNPQHPANRYRHYEFQTLSLGTSEVDELLNCCAEETTCGGTQSTVL

Max tile of activation domain from residues 51 to 130 (estimated 38.8% to 41.5% of cells activated):

RYSGWSTEYTQWHSDLTTELLWAHPRQVPMDEALAAAAAASYQVNPQHPANRYRHYEFQTLSLGTSEVDELLNCCAEET

HHV7 CTNP (P52464)

Gene: U36 ; Protein Family: CTNP



Extended activation domain from residues 1 to 80:

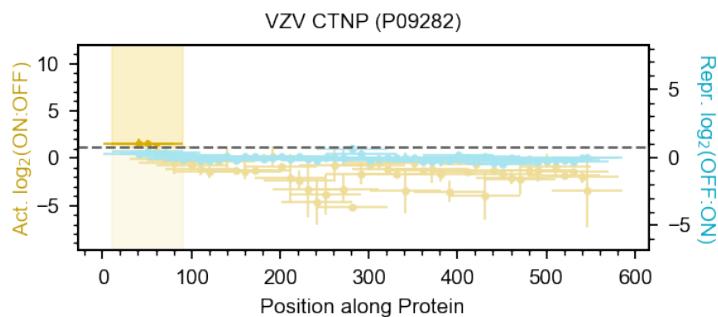
MAYKGWNSDSFSMSELNFNEILLYAHLDSSGIDSDDLNTNPNTLENEINSVEKTLNIEELKKITTALNIDNRNCNCSIIN

Max tile of activation domain from residues 1 to 80 (estimated 11.4% to 15.3% of cells activated):

MAYKGWNSDSFSMSELNFNEILLYAHLDSSGIDSDDLNTNPNTLENEINSVEKTLNIEELKKITTALNIDNRNCNCSIIN

VZV CTNP (P09282)

Gene: ORF26 ; Protein Family: CTNP



Extended activation domain from residues 1 to 100:

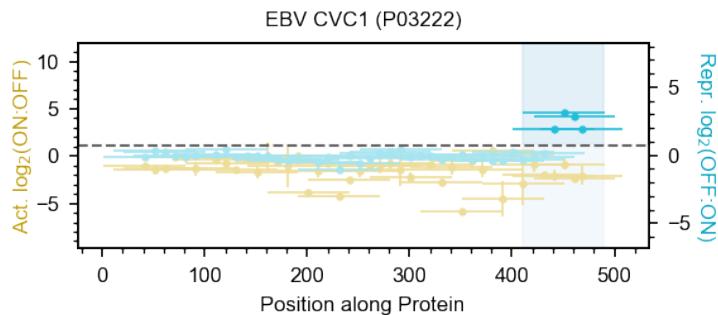
MDRVESEEPMDGFESPVFSENTSSNSGWCSDAFSDSYIAYNPALLKNDLLFSELLFASHLINVPRAIENNVTYEASSAVGVVDNEMTSSTTEFIEEIGDV

Max tile of activation domain from residues 11 to 90 (estimated 2.6% to 3.9% of cells activated):

DGFESPVFSENTSSNSGWCSDAFSDSYIAYNPALLKNDLLFSELLFASHLINVPRAIENNVTYEASSAVGVVDNEMTSST

## EBV CVC1 (P03222)

Gene: BGLF1 ; Protein Family: CVC1

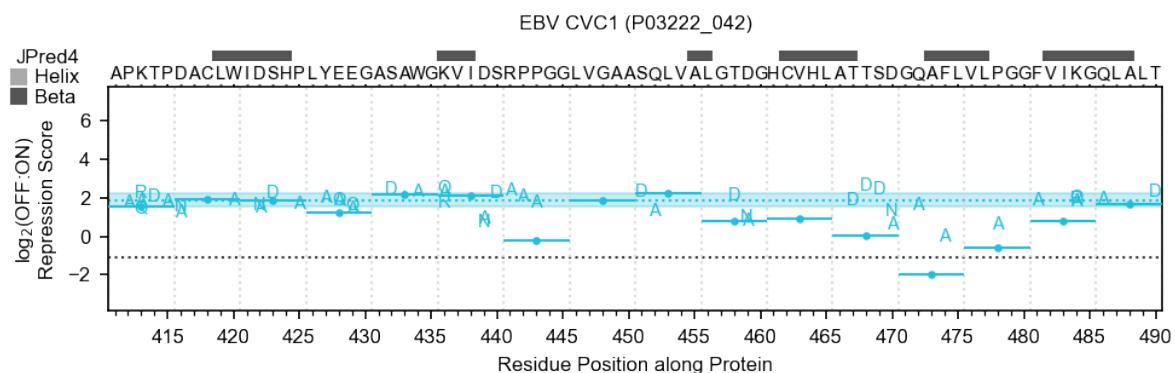


Extended repression domain from residues 401 to 507:

SCWVKATISNAPKTPDACLWIDSHPLYEEGASAWGKVIDSRRPPGGLVGAASQLVALGTDGHCVHLATTSDGQAFLVLPGGFVIKGQLALTPEERGYILAR  
HGIReq

Max tile of repression domain from residues 411 to 490 (estimated 73.3% to 73.7% of cells repressed):

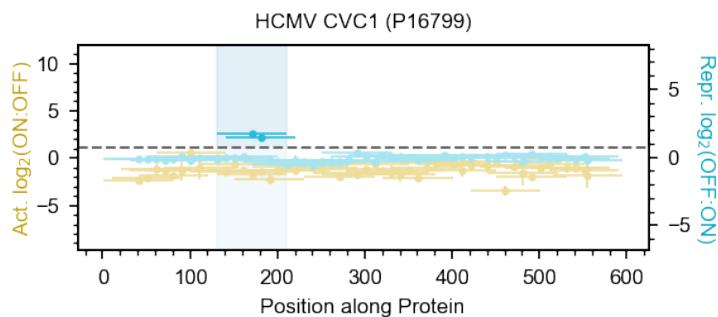
APKTPDACLWIDSHPLYEEGASAWGKVIDSRRPPGGLVGAASQLVALGTDGHCVHLATTSDGQAFLVLPGGFVIKGQLALT



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	433	439	AWGKVID	No	-	-	
Sin3A_SID	449	453	AASQL	No	-	-	
SUMO_SIM_par	451	459	SQLVALGTD	No	-	-	
	-	-		No	471	475	GQAFL

HCMV CVC1 (P16799)

Gene: UL93 ; Protein Family: CVC1



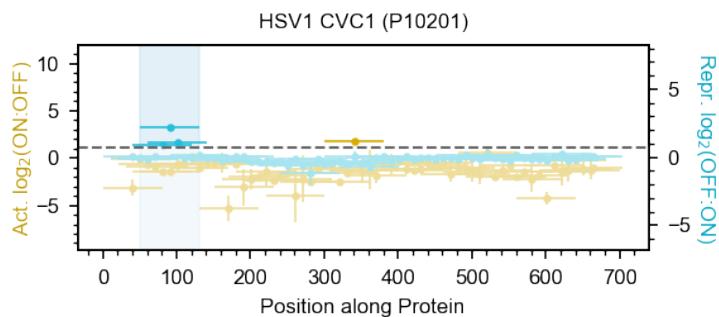
Extended repression domain from residues 131 to 220:

TGLRCPDNRLSGAQTLHLRLVWPDGSYRDWEFLARDLLREEMEANKRDRQHQQLATTNHRRRGGLRNNLDNGSDRRLPEAAVASLETAV

Max tile of repression domain from residues 131 to 210 (estimated 36.4% to 37.4% of cells repressed):

TGLRCPDNRLSGAQTLHLRLVWPDGSYRDWEFLARDLLREEMEANKRDRQHQQLATTNHRRRGGLRNNLDNGSDRRLPE

HSV1 CVC1 (P10201)  
Gene: UL17 ; Protein Family: CVC1

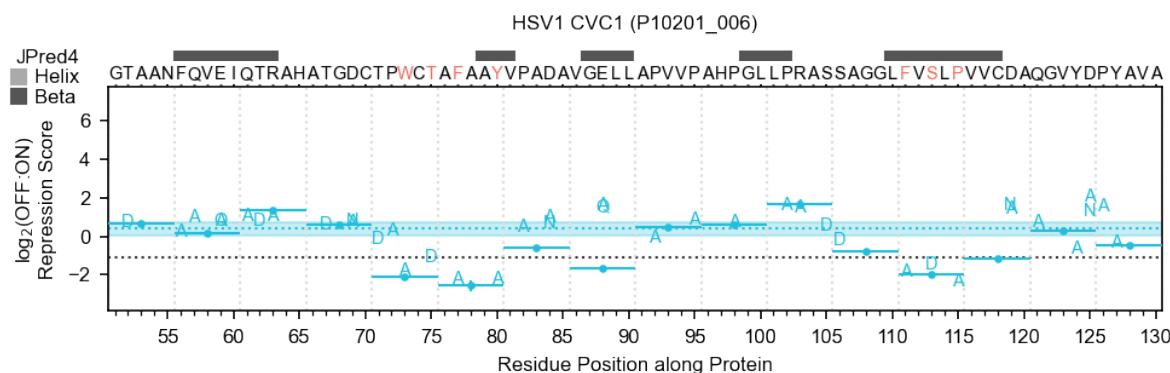


Extended repression domain from residues 41 to 140:

AALMRGRPGLGTAANFQVEIQTRAHATGDCTPWCTAFAAYVPADAVGELLAPVVAHPGLLPRASSAGGLFVSLPVVCDAQGVYDPYAVAALRLAWGS  
GA

Max tile of repression domain from residues 51 to 130 (estimated 48.4% to 49.7% of cells repressed):

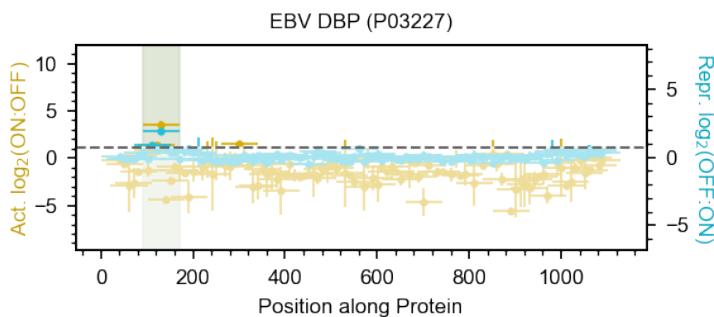
GTAANFQVEIQTRAHATGDCTPWCTAFAAYVPADAVGELLAPVVAHPGLLPRASSAGGLFVSLPVVCDAQGVYDPYAVA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	71	80	TPWCTAFAAY
flexi_NRBOX	85	91	AVGELLA	Yes	86	90	VGELL
MYND_1	98	102	PGLLP	No	-	-	
-	-	-		No	111	120	FVSLPVVCDA

EBV DBP (P03227)

Gene: BALF2 ; Protein Family: DBP



Extended repression domain from residues 91 to 180:

YVFHNAHMVPPIFEGPGLEALCGETREVFGYDAYSALPRESSKPGDFFPEGLDPSAYLGAVAITEAFKERLYSGNLVAIPSLKQEAVGQ

Max tile of repression domain from residues 91 to 170 (estimated 41.6% to 42.1% of cells repressed):

YVFHNAHMVPPIFEGPGLEALCGETREVFGYDAYSALPRESSKPGDFFPEGLDPSAYLGAVAITEAFKERLYSGNLVAIP

Extended activation domain from residues 81 to 170:

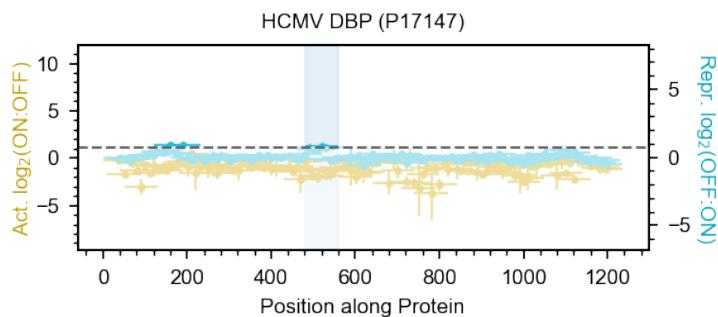
LRATSYHRDIYVFHNAHMVPPIFEGPGLEALCGETREVFGYDAYSALPRESSKPGDFFPEGLDPSAYLGAVAITEAFKERLYSGNLVAIP

Max tile of activation domain from residues 91 to 170 (estimated 9.2% to 16.2% of cells activated):

YVFHNAHMVPPIFEGPGLEALCGETREVFGYDAYSALPRESSKPGDFFPEGLDPSAYLGAVAITEAFKERLYSGNLVAIP

HCMV DBP (P17147)

Gene: UL57 ; Protein Family: DBP



Extended repression domain from residues 481 to 570:

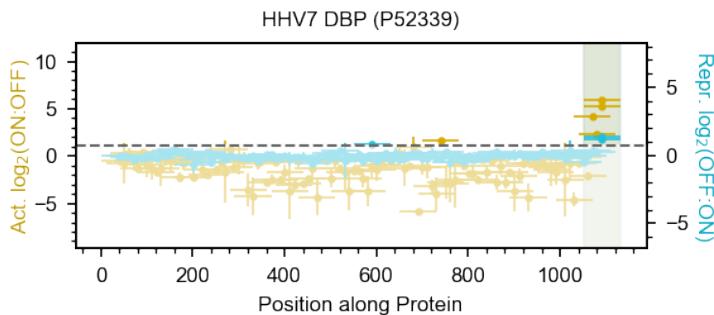
HTCYQTAFVRVRTRLPVVPKQPKKEPCVITVQSRLFNDVDILGSFGRRYNVDAKDGGLDKGDDGVPGGGAGGGGGRDVSGGSDGLGGG

Max tile of repression domain from residues 481 to 560 (estimated 15.7% to 17.1% of cells repressed):

HTCYQTAFVRVRTRLPVVPKQPKKEPCVITVQSRLFNDVDILGSFGRRYNVDAKDGGLDKGDDGVPGGGAGGGGGRDVS

## HHV7 DBP (P52339)

Gene: U41 ; Protein Family: DBP



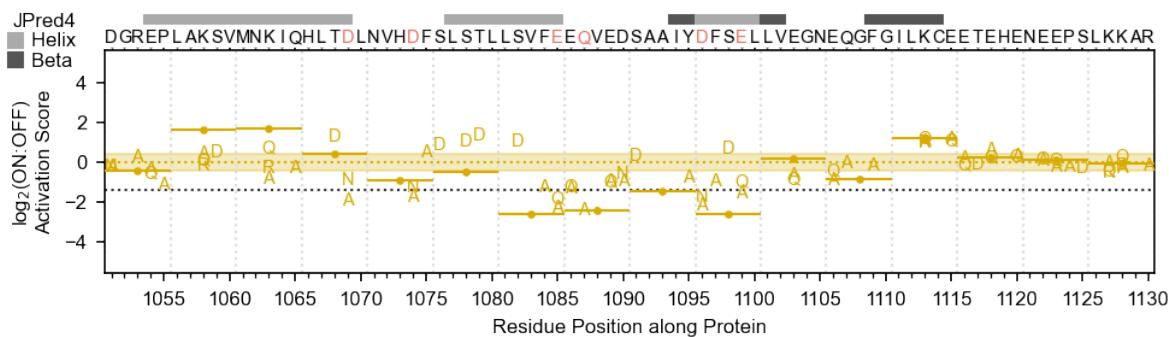
Extended activation domain from residues 1031 to 1131:

AEVMKDRDSKPTMDDMLFYVDGREPLAKSVMNKIQHLTDLNVHDFSLSTLLSVFEEQVEDSAAIYDFSELLVEGNEQGFGILKCEETEHENEEPSLKKAR  
L

Max tile of activation domain from residues 1051 to 1130 (estimated 52.6% to 56.1% of cells activated):

DGREPLAKSVMNKIQHLTDLNVHDFSLSTLLSVFEEQVEDSAAIYDFSELLVEGNEQGFGILKCEETEHENEEPSLKKAR

## HHV7 DBP (P52339\_106)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	1076	1082	SLSTLLS	Yes			
SUMO_SIM_par	1078	1086	STLLSVFEE	Yes	1081	1100	LSVFEQVEDSAAIYDFSEL
flexi_NRBOX	1079	1085	TLLSVFE	Yes	1081	1100	LSVFEQVEDSAAIYDFSEL
flexi_NRBOX	1096	1102	DFSELLV	Yes	1081	1100	LSVFEQVEDSAAIYDFSEL
SUMO_for	1112	1115	LKCE	No	-	-	

Extended repression domain from residues 1051 to 1131:

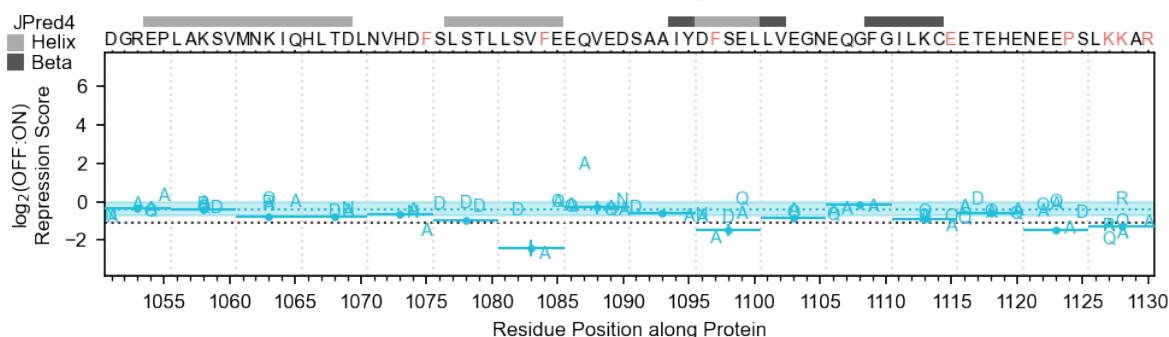
DGREPLAKSVMNKIQHLTDLNVHDFSLSTLLSVFEEQVEDSAAIYDFSELLVEGNEQGFGILKCEETEHENEEPSLKKARL

Max tile of repression domain from residues 1052 to 1131 (estimated 24.8% to 28.8% of cells repressed):

GREPLAKSVMNKIQHLTDLNVHDFSLSTLLSVFEEQVEDSAAIYDFSELLVEGNEQGFGILKCEETEHENEEPSLKKARL

Neighboring tile of repression domain from 1052 to 1131:

## HHV7 DBP (P52339\_106)



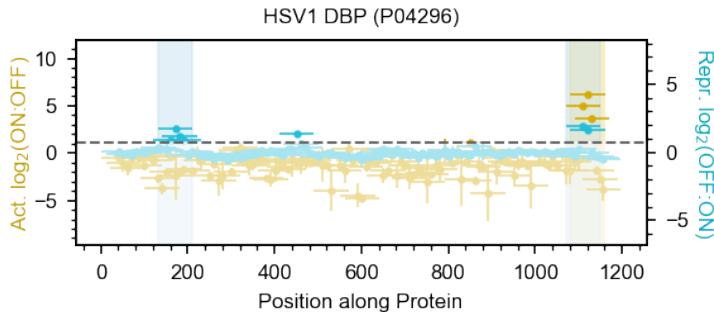
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	1076	1082	SLSTLLS	Yes	1081	1085	LSVFE
SUMO_SIM_par	1078	1086	STLLSVFEE	Yes	1081	1085	LSVFE
flexi_NRBOX	1079	1085	TLLSVFE	Yes	1081	1085	LSVFE
flexi_NRBOX	1096	1102	DFSELLV	Yes	1096	1100	DFSEL
SUMO_for	1112	1115	LKCE	No	-	-	
	-	-		No	1121	1130	NEEPSLKKAR

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## HSV1 DBP (P04296)

Gene: UL29 ; Protein Family: DBP



Extended repression domain from residues 121 to 230:

RHFGFSDYTPRGDLKHETTGEALCERLGLDPDRALLYLVVTEGFKEAVCINNTFLHLGGSDKVTIGGAEVHRIPVYPLQLFMPDFSRVIAEPFNANHRSI  
GEKFTYPLP

Max tile of repression domain from residues 131 to 210 (estimated 33.3% to 38.3% of cells repressed):

RPGDLKHETTGEALCERLGLDPDRALLYLVVTEGFKEAVCINNTFLHLGGSDKVTIGGAEVHRIPVYPLQLFMPDFSRVI

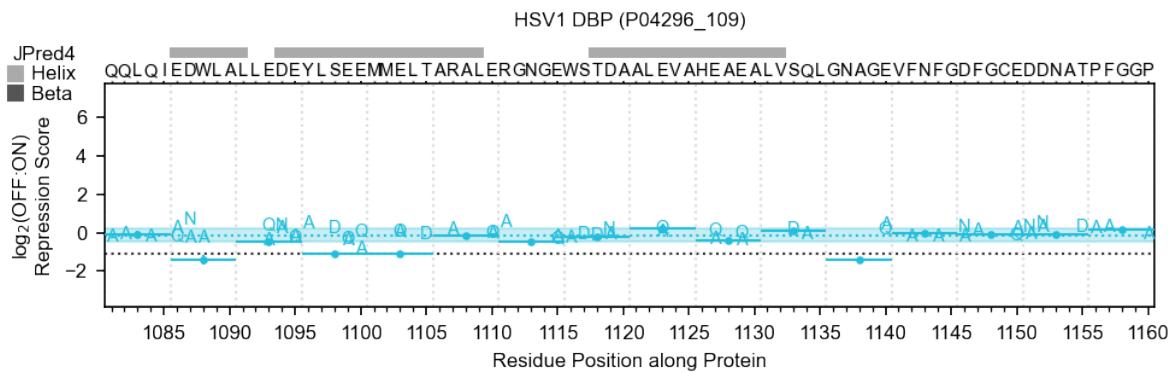
Extended repression domain from residues 1071 to 1160:

ATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMELTARALERGNGEWSTDAALEVAHEAEALVSQLGNAGEVFNFGDFGCEDDNATPFGGP

Max tile of repression domain from residues 1071 to 1150 (estimated 41.1% to 43.0% of cells repressed):

ATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMELTARALERGNGEWSTDAALEVAHEAEALVSQLGNAGEVFNFGDFGCE

Neighboring tile of repression domain from 1081 to 1160:



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	1086	1095	EDWLALLEDE	Yes	1086	1090	EDWLA
flexi_NRBOX	1087	1093	DWLALLE	Yes	1086	1090	EDWLA
	-	-		No	1096	1105	YLSEEMMELT
	-	-		No	1136	1140	GNAGE

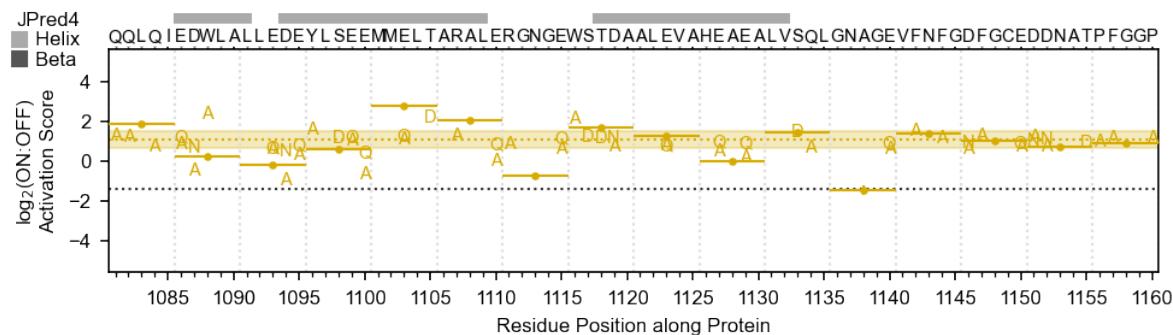
Extended activation domain from residues 1071 to 1170:

ATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMELTARALERGNGEWSTDAALEVAHEAEALVSQLGNAGEVFNFGDFGCEDDNATPFGGPGAPGPAFA  
GR

Max tile of activation domain from residues 1081 to 1160 (estimated 58.4% to 61.9% of cells activated):

QQLQIEDWLALLEDEYLSEEMMELTARALERGNGEWSTDAALEVAHEAEALVSQLGNAGEVFNFGDFGCEDDNATPFGGP

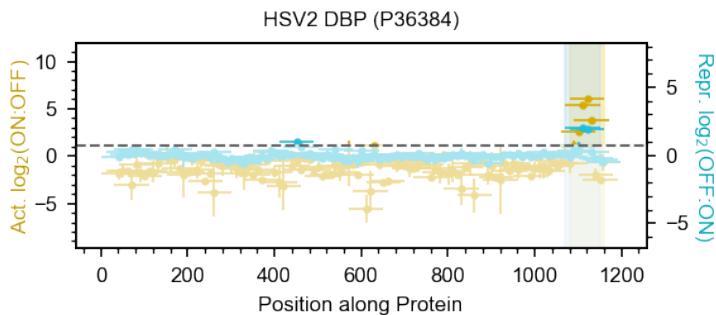
## HSV1 DBP (P04296\_109)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	1086	1095	EDWLALLEDE	No	-	-	
flexi_NRBOX	1087	1093	DWLALLE	No	-	-	
	-	-		No	1136	1140	GNAGE

## HSV2 DBP (P36384)

Gene: UL29 ; Protein Family: DBP



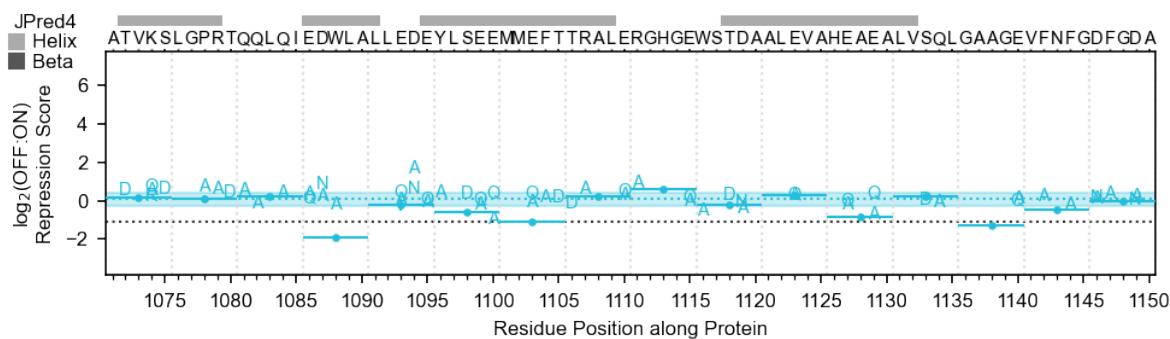
Extended repression domain from residues 1071 to 1160:

ATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMEFTTRALERGHGEWSTDAALEVAHEAEALVSQLGAAGEVFNFGDFGDADDHAASFGLL

Max tile of repression domain from residues 1071 to 1150 (estimated 41.0% to 44.5% of cells repressed):

ATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMEFTTRALERGHGEWSTDAALEVAHEAEALVSQLGAAGEVFNFGDFGDA

## HSV2 DBP (P36384\_108)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	1086	1095	EDWLALLEDE	Yes	1086	1090	EDWLA
flexi_NRBOX	1087	1093	DWLALLE	Yes	1086	1090	EDWLA
-	-	-		No	1101	1105	MMEFT
-	-	-		No	1136	1140	GAAGE

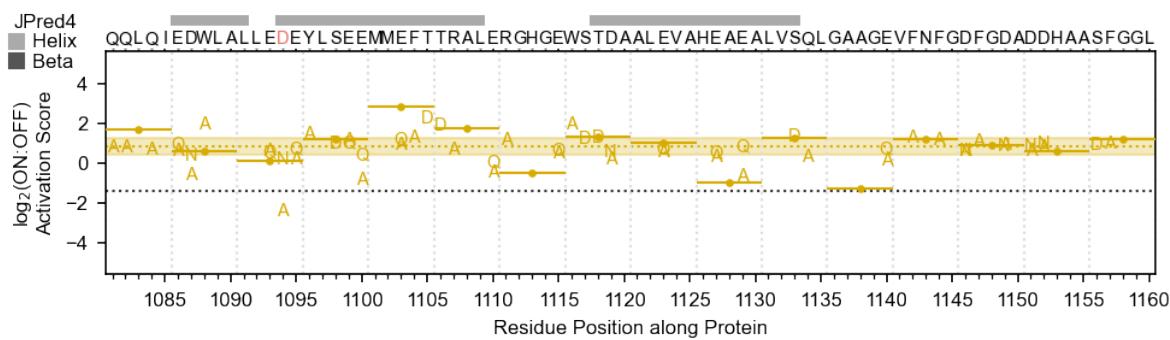
Extended activation domain from residues 1061 to 1170:

GAAVASSVFVATVKSLGPRTQQQLQIEDWLALLEDEYLSEEMMEFTTRALERGHGEWSTDAALEVAHEAEALVSQLGAAGEVFNFGDFGDADDHAASFGLAAAAAAGAAVG

Max tile of activation domain from residues 1081 to 1160 (estimated 55.7% to 56.4% of cells activated):

QQLQIEDWLALLEDEYLSEEMMEFTTRALERGHGEWSTDAALEVAHEAEALVSQLGAAGEVFNFGDFGDADDHAASFGLL

## HSV2 DBP (P36384\_109)



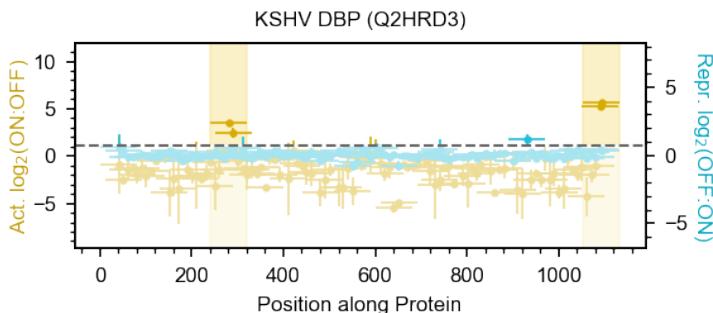
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	1086	1095	EDWLALLEDE	No	-	-	
flexi_NRBOX	1087	1093	DWLALLE	No	-	-	

---

KSHV DBP (Q2HRD3)

Gene: ORF6 ; Protein Family: DBP



Extended activation domain from residues 241 to 330:

SERQFVHDQYKIPKLVQAKDFPQCASRGTDGSTMVIDSLVAELGMSYGLSIEGPQDSCEVLNYDTWPIFENCETPDARLRALEVWHAE

Max tile of activation domain from residues 241 to 320 (estimated 9.9% to 15.0% of cells activated):

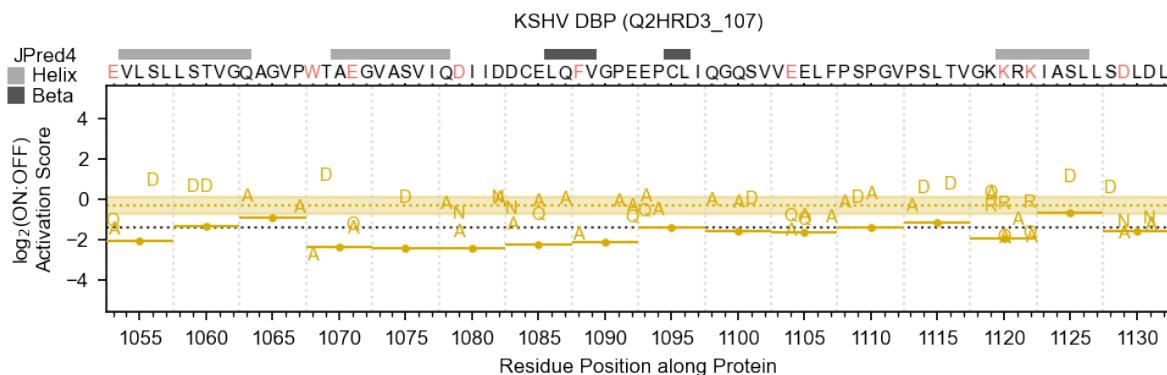
SERQFVHDQYKIPKLVQAKDFPQCASRGTDGSTMVIDSLVAELGMSYGLSIEGPQDSCEVLNYDTWPIFENCETPDAR

Extended activation domain from residues 1051 to 1132:

GDEVLSLLSTVGQAGVPWTAEGVASVIQDIIDDCELQFVGPEEPCLIQQGSVVEELFPSPGVPSLTVGKKRKIASLLSDL

Max tile of activation domain from residues 1053 to 1132 (estimated 42.9% to 51.7% of cells activated):

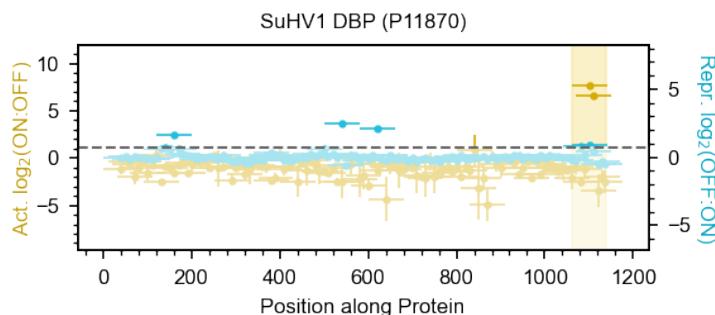
EVLSLLSTVGQAGVPWTAEGVASVIQDIIDDCELQFVGPEEPCLIQQGSVVEELFPSPGVPSLTVGKKRKIASLLSDL



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	1053	1059	EVLSLLS	Yes	1053	1057	EVLSL
SUMO_SIM_par	1053	1060	EVLSLLST	Yes	1053	1057	EVLSL
SUMO_SIM_anti	1053	1060	EVLSLLST	Yes	1053	1057	EVLSL
flexi_NRBOX	1076	1082	VIQDIID	Yes	1068	1092	WTAEGVASVIQDIIDDCELQFVGPE
flexi_NRBOX	1072	1078	GVASVIQ	Yes	1068	1092	WTAEGVASVIQDIIDDCELQFVGPE
-	-	-		No	1098	1107	QGGSVVEELF
flexi_NRBOX	1122	1128	KIASLLS	Yes	1118	1122	GKKRK
flexi_NRBOX	1122	1128	KIASLLS	Yes	1128	1132	SDLDL

## SuHV1 DBP (P11870)

Gene: UL29 ; Protein Family: DBP

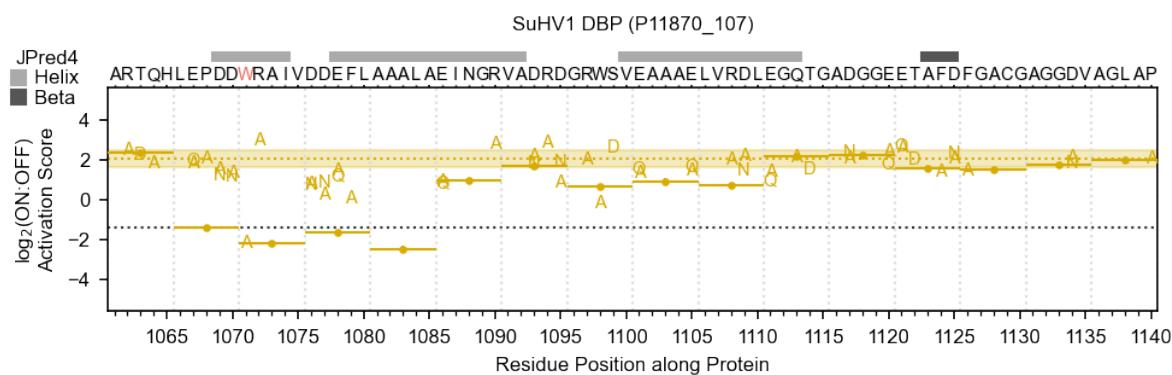


Extended activation domain from residues 1061 to 1150:

ARTQHLEPDDWRAIVDDEFLAAALAEINGRVADRDGRWSVEAAAELVRDLEGQTGADGGEETAFDFGACGAGGDVAGLAPASLVPAELGG

Max tile of activation domain from residues 1061 to 1140 (estimated 82.7% to 85.4% of cells activated):

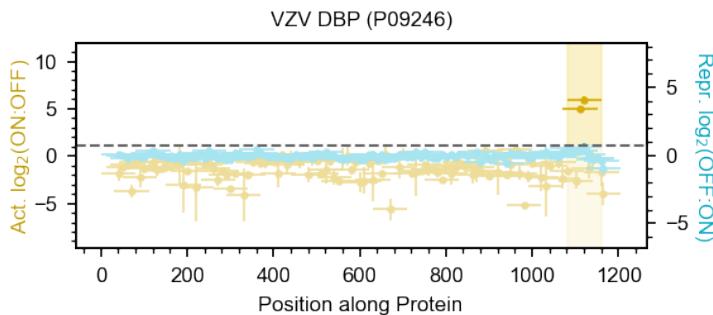
ARTQHLEPDDWRAIVDDEFLAAALAEINGRVADRDGRWSVEAAAELVRDLEGQTGADGGEETAFDFGACGAGGDVAGLAP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	1070	1076	DWRAIVD	Yes	1066	1085	LEPDDWRAIVDDEFLAAALA
Sin3A_SID	1102	1106	AAAEL	No	-	-	

## VZV DBP (P09246)

Gene: ORF29 ; Protein Family: DBP

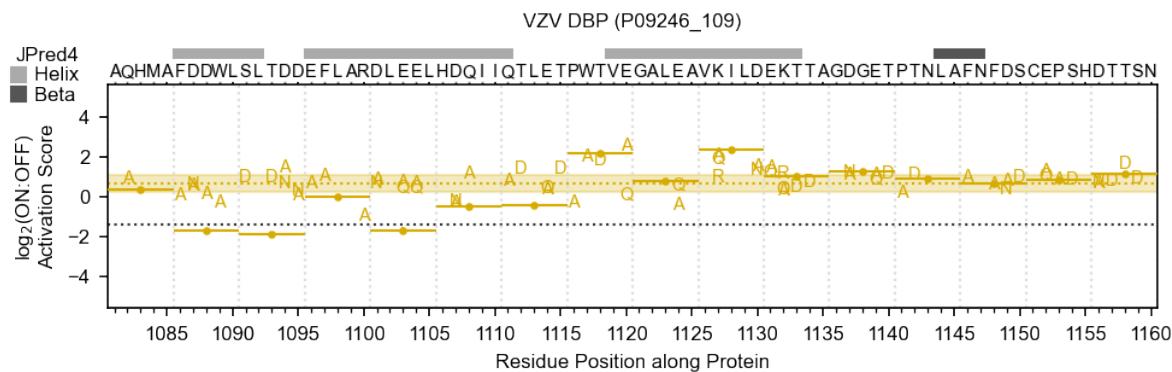


Extended activation domain from residues 1071 to 1160:

ATVVRAVGARAQHMAFDDWLSLTDEFLARDLEELHDQIQTLETPTVEGALEAVKILDEKTTAGDGETPTNLAFNFDSCESHDTSN

Max tile of activation domain from residues 1081 to 1160 (estimated 48.5% to 62.9% of cells activated):

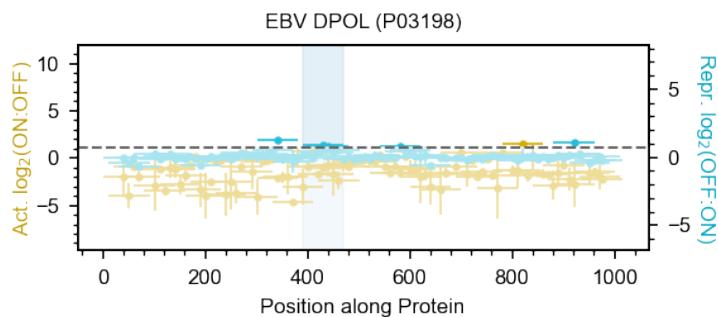
AQHMAFDDWLSLTDEFLARDLEELHDQIQTLETPTVEGALEAVKILDEKTTAGDGETPTNLAFNFDSCESHDTSN



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	1086	1095	FDDWLSLTDD
-	-	-		No	1101	1105	DLEEL
SUMO_rev	1124	1134	EAVKILDEKTT	No	-	-	
CtBP_expanded	1141	1145	PTNLA	No	-	-	

EBV DPOL (P03198)

Gene: BALF5 ; Protein Family: DPOL



Extended repression domain from residues 391 to 480:

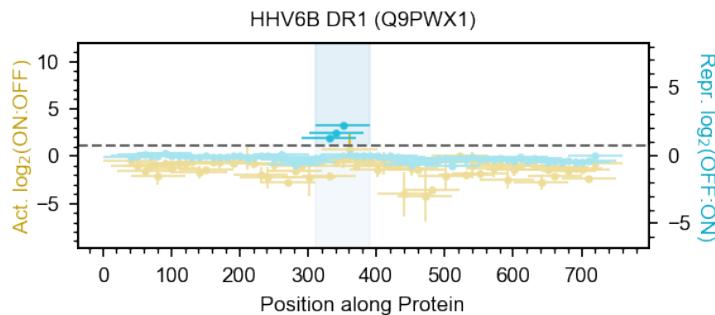
RARHIYSINPASLGKIRAGGVCEVRRPHDAGKGFLRANTKVRITGLIPIDMYAVCRDKLSLSDYKLDTVARHILLGAKKEDVHYKEIPRLF

Max tile of repression domain from residues 391 to 470 (estimated 18.0% to 18.3% of cells repressed):

RARHIYSINPASLGKIRAGGVCEVRRPHDAGKGFLRANTKVRITGLIPIDMYAVCRDKLSLSDYKLDTVARHLLGAKKED

## HHV6B DR1 (Q9PWX1)

Gene: DR1 ; Protein Family: DR1

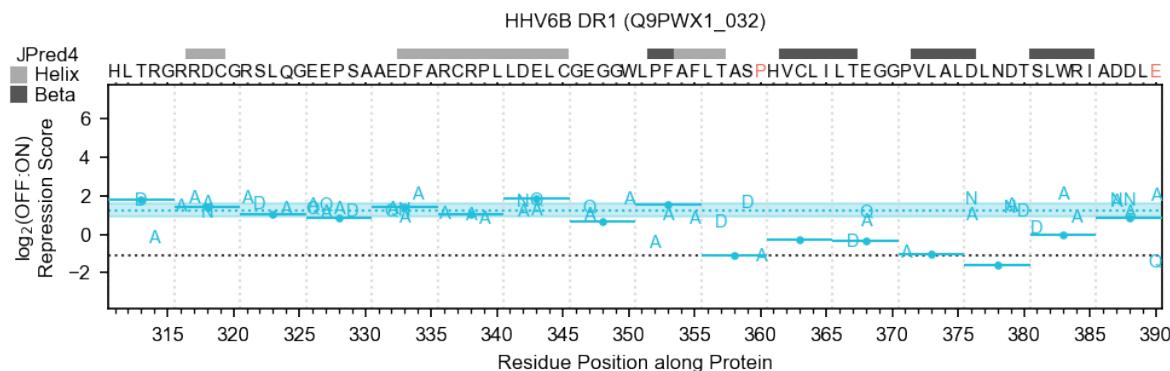


Extended repression domain from residues 291 to 390:

GKEEAERGRRQQATDRLASPHLTRGRDCGRSLQGEEPSSAEDFARCRPLLDELCGEGGWLPFAFLTASPHVCLILTEGGPVLA  
LDLNDSLWRIADDLE

Max tile of repression domain from residues 311 to 390 (estimated 46.9% to 51.4% of cells repressed):

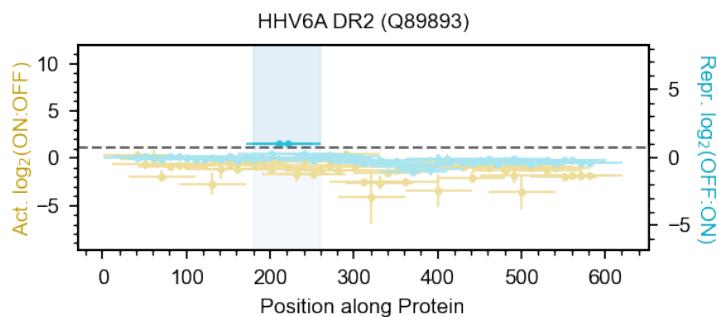
HLTRGRRDCGRSLQGEEPSSAEDFARCRPLLDELCGEGGWLPFAFLTASPHVCLILTEGGPVLA  
LDLNDSLWRIADDLE



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	356	360	LTASP
flexi_NRBOX	361	367	HVCLILT	No	-	-	
SUMO_SIM_par	371	376	PVLALD	Yes	376	380	DLNDT

HHV6A DR2 (Q89893)

Gene: DR2 ; Protein Family: DR2



Extended repression domain from residues 171 to 260:

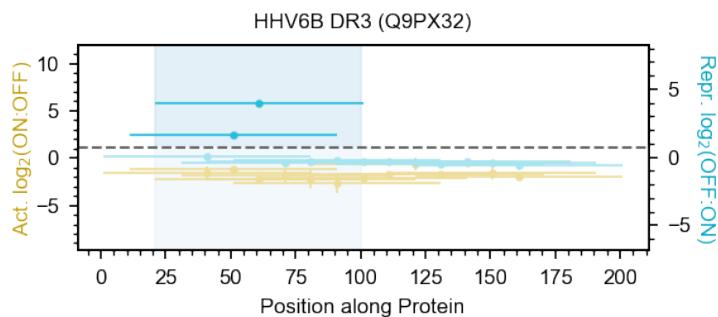
PVLEWESTELVLTDWRRGRNEAQRDAPSVAEHFARCRPLLDELCGEGGWLPFAFLSTSPHVWLILTEGGPVLA  
VDVNDSVWRRIADDLEL

Max tile of repression domain from residues 181 to 260 (estimated 18.4% to 20.2% of cells repressed):

VLTDWRRGRNEAQRDAPSVAEHFARCRPLLDELCGEGGWLPFAFLSTSPHVWLILTEGGPVLA  
VDVNDSVWRRIADDLEL

## HHV6B DR3 (Q9PX32)

Gene: DR3 ; Protein Family: DR3

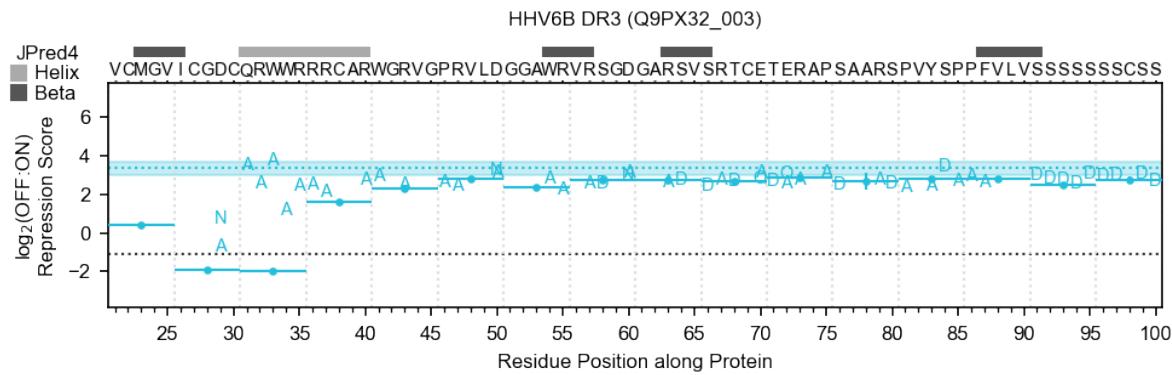


Extended repression domain from residues 11 to 100:

ACVCAGLCCWVCMGVICGDCQRWWRRRCARWGRVGPRVLDDGAWRVRSGDGARSVSRTCETERAPSAARSPVYSPPFVLVSSSSSSCSS

Max tile of repression domain from residues 21 to 100 (estimated 86.5% to 87.7% of cells repressed):

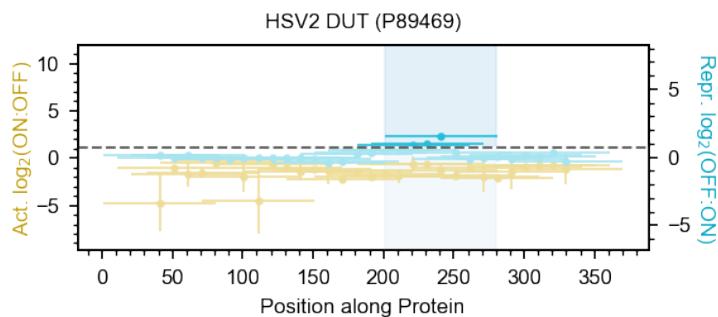
VCMGVICGDCQRWWRRRCARWGRVGPRVLDDGAWRVRSGDGARSVSRTCETERAPSAARSPVYSPPFVLVSSSSSSCSS



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	26	35	ICGDCQRWWR

HSV2 DUT (P89469)

Gene: UL50 ; Protein Family: DUT



Extended repression domain from residues 181 to 280:

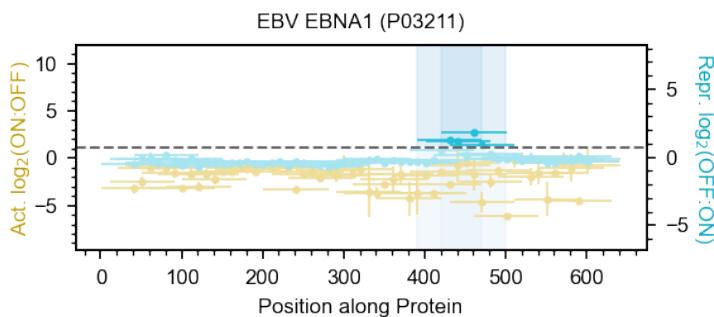
RRGGSLVYAGELTQVTTEHGDCVHEAPAFPLPKREEDAGFDILIHRAVTVPANGATVIQPSLRLRAADGPEACYVLGRSSLNARGLLVMPTRWPSGHAC  
A

Max tile of repression domain from residues 201 to 280 (estimated 28.8% to 36.5% of cells repressed):

DCVHEAPAFPLPKREEDAGFDILIHRAVTVPANGATVIQPSLRLRAADGPEACYVLGRSSLNARGLLVMPTRWPSGHACA

## EBV EBNA1 (P03211)

Gene: BKRF1 ; Protein Family: EBNA ; EBV Strain: B95-8 (Type 1)



Extended repression domain from residues 391 to 480:

SGSPPRRPPPGRPFHPVGEADYFEYHQEGGPDPGEVDVPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFEN

Max tile of repression domain from residues 391 to 470 (estimated 22.4% to 28.8% of cells repressed):

SGSPPRRPPPGRPFHPVGEADYFEYHQEGGPDPGEVDVPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWFGKHRG

Extended repression domain from residues 421 to 510:

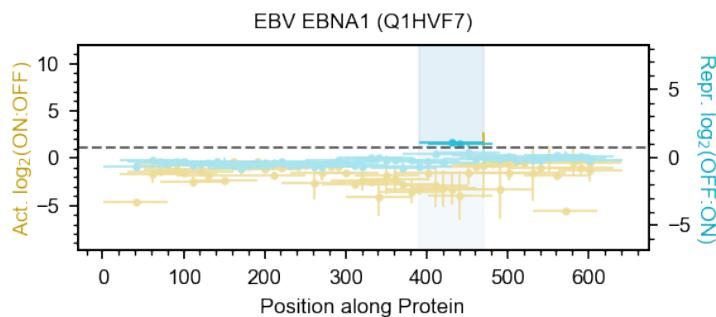
GGPDGEPDVPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFENIAEGLRALLARSHVERTTDEGTWAGVFVY

Max tile of repression domain from residues 421 to 500 (estimated 35.2% to 41.0% of cells repressed):

GGPDGEPDVPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFENIAEGLRALLARSHVERTTDE

EBV EBNA1 (Q1HVF7)

Gene: BKRF1 ; Protein Family: EBNA ; EBV Strain: AG876 (Type 2)



Extended repression domain from residues 391 to 480:

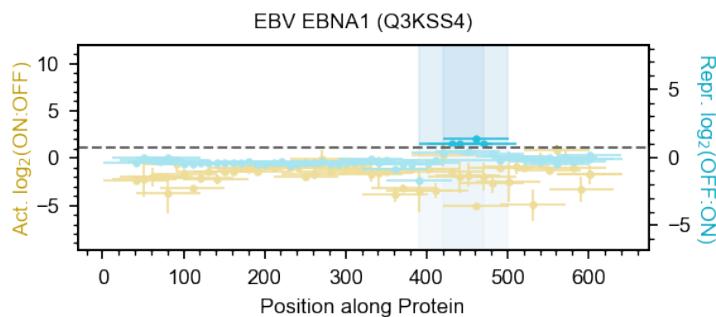
SGSPPRRPPPGRPFHPVAEADYFEYHQEGGPDPDMPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWYGKHRGEGGSSQKFEN

Max tile of repression domain from residues 391 to 470 (estimated 16.3% to 26.0% of cells repressed):

SGSPPRRPPPGRPFHPVAEADYFEYHQEGGPDPDMPPGAIEQGPADDPGEGPSTGPRGQGDGGRRKKGGWYGKHRG

**EBV EBNA1 (Q3KSS4)**

Gene: BKRF1 ; Protein Family: EBNA ; EBV Strain: GD1 (Type 1)



Extended repression domain from residues 391 to 480:

SGSPPRRPPPGRPFHPVGDADYFEYLQEQQPDGEVDVPPGAIEQGPTDDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFEN

Max tile of repression domain from residues 391 to 470 (estimated 18.2% to 20.2% of cells repressed):

SGSPPRRPPPGRPFHPVGDADYFEYLQEQQPDGEVDVPPGAIEQGPTDDPGEGPSTGPRGQGDGGRRKKGGWFGKHRG

Extended repression domain from residues 421 to 510:

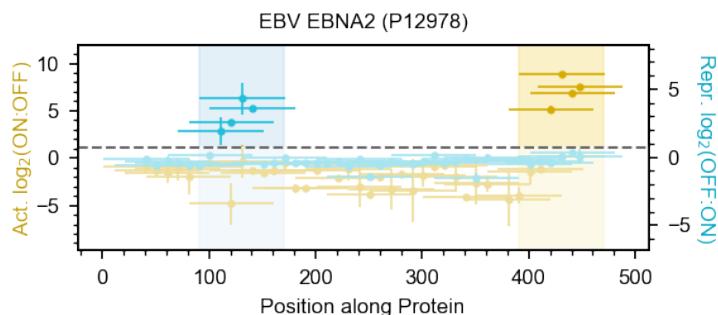
GGPDGEVDVPPGAIEQGPTDDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFENIAEGLRVLLARSHVERTTEEGNWAGVFVY

Max tile of repression domain from residues 421 to 500 (estimated 25.7% to 29.8% of cells repressed):

GGPDGEVDVPPGAIEQGPTDDPGEGPSTGPRGQGDGGRRKKGGWFGKHRGQGGSNPKFENIAEGLRVLLARSHVERTTEE

## EBV EBNA2 (P12978)

Gene: BYRF1 ; Protein Family: EBNA ; EBV Strain: B95-8 (Type 1)

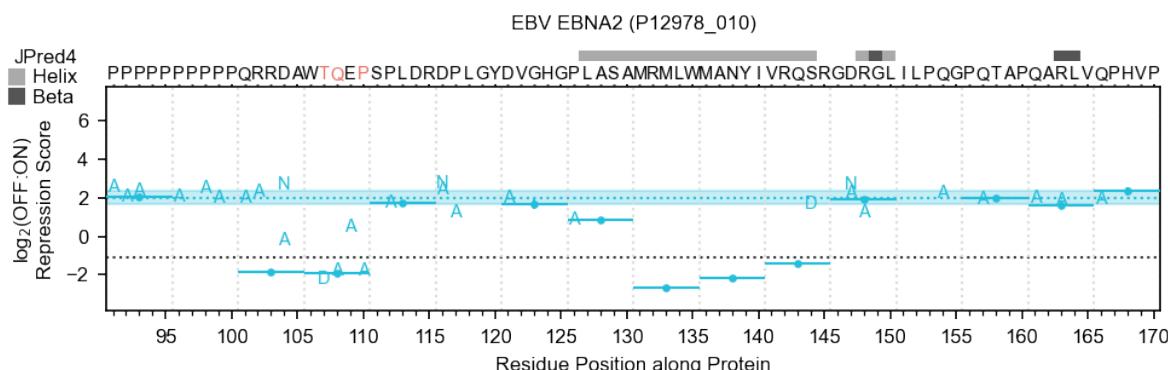


Extended repression domain from residues 71 to 180:

```
PPPPPPPPPPPPPPPPPPPPQRRDAWTQEPLSPLDRDPLGYDVGHGPLASAMRMLWMANYIVRQSRGDRGLILPQGPQTAPQARLVQP
HVPLLRPTAPTIL
```

Max tile of repression domain from residues 91 to 170 (estimated 73.9% to 98.2% of cells repressed):

```
PPPPPPPPPPQRRDAWTQEPLSPLDRDPLGYDVGHGPLASAMRMLWMANYIVRQSRGDRGLILPQGPQTAPQARLVQPHVP
```



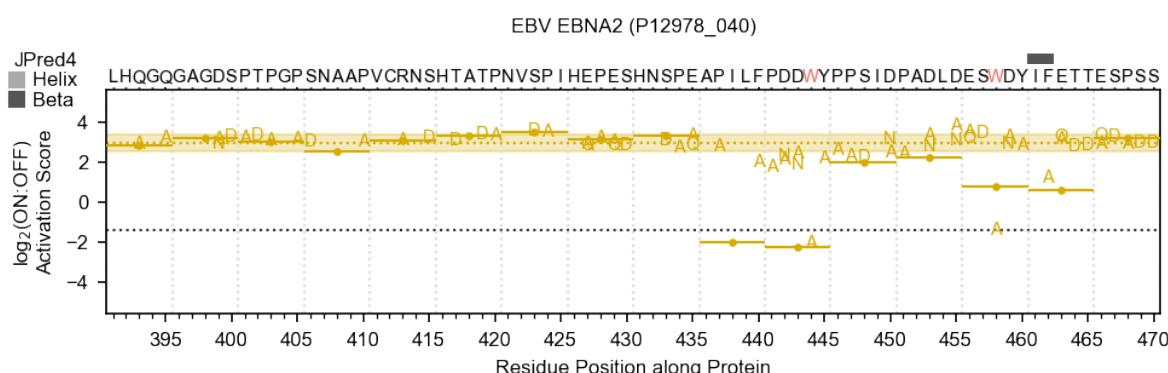
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	101	110	QRRDAWTQEP
-	-	-		No	131	145	MRMLWMANYIVRQSR

Extended activation domain from residues 381 to 487:

```
SMPELSPVVLHQQGAGDSPTPGPSNAAPVCRNSHTATPNVSP|HEPESHNSPEAPIFPDDWYPPSIDPADLDESWDYIFETTESPSSDEDYVEGPS
KRPRIPIQ
```

Max tile of activation domain from residues 391 to 470 (estimated 92.3% to 93.7% of cells activated):

```
LHQGQQGAGDSPTPGPSNAAPVCRNSHTATPNVSP|HEPESHNSPEAPIFPDDWYPPSIDPADLDESWDYIFETTESPSS
```



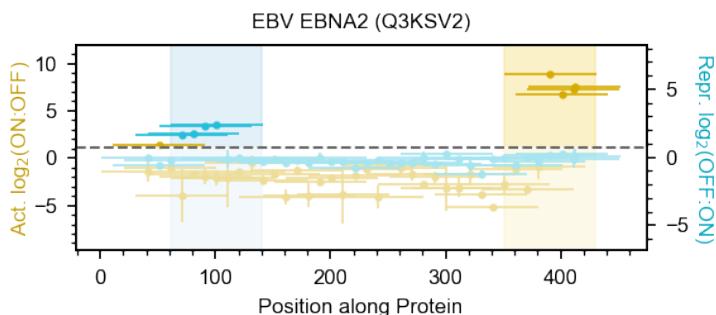
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
MYND_1	437	441	PILFP	Yes	436	445	APILFPDDWY
CtBP_expanded	451	455	PADLD	No	-	-	
flexi_NRBOX	457	463	SWDYIFE	No	-	-	

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## EBV EBNA2 (Q3KSV2)

Gene: BYRF1 ; Protein Family: EBNA ; EBV Strain: GD1 (Type 1)

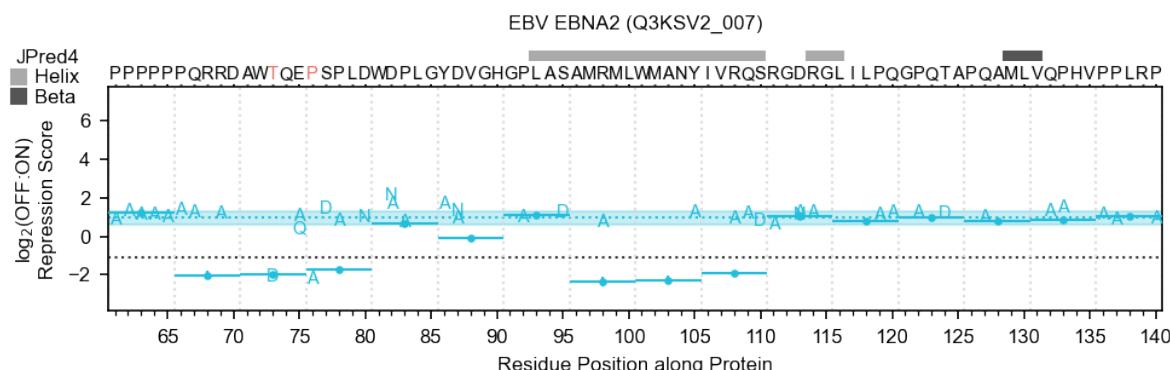


Extended repression domain from residues 31 to 140:

IPSNPYQEQLSDTPLIPLTIVGENTGVPPPPPPPQQRRDAWTQEPLSPLWDPLGLYDVGHGPLASAMRMLWMANYIVRQSRGDRGLILPQGPQTAPQA  
MLVQPHVPPLRP

Max tile of repression domain from residues 61 to 140 (estimated 47.2% to 60.1% of cells repressed):

PPPPPPQRRDAWTQEPLSPLWDPLGLYDVGHGPLASAMRMLWMANYIVRQSRGDRGLILPQGPQTAPQAMLVQPHVPPLRP



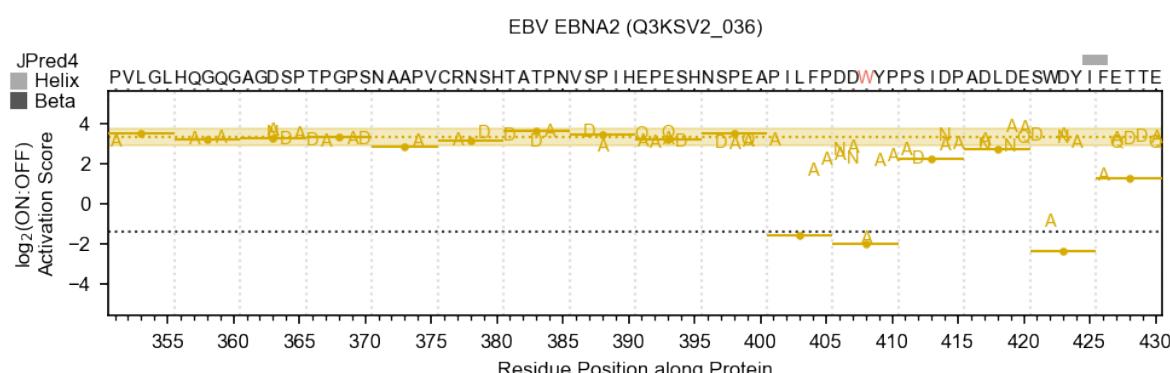
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	66	80	PQRRDAWTQEPLSPLD
-	-	-		No	96	110	AMRMLWMANYIVRQS
MYND_1	136	140	PPLRP	No	-	-	

Extended activation domain from residues 351 to 451:

PVLGLHQGQGAGDSPTPGPSNAAPVCRNSHTATPNVSP|HEPESHNSPEAPIFPDDWYPPSIDPADLDESWDYIFETTEESPSSDEDYVEGPSKRPRPSI  
Q

Max tile of activation domain from residues 351 to 430 (estimated 92.9% to 92.9% of cells activated):

PVLGLHQGQGAGDSPTPGPSNAAPVCRNSHTATPNVSP|HEPESHNSPEAPIFPDDWYPPSIDPADLDESWDYIFETTE



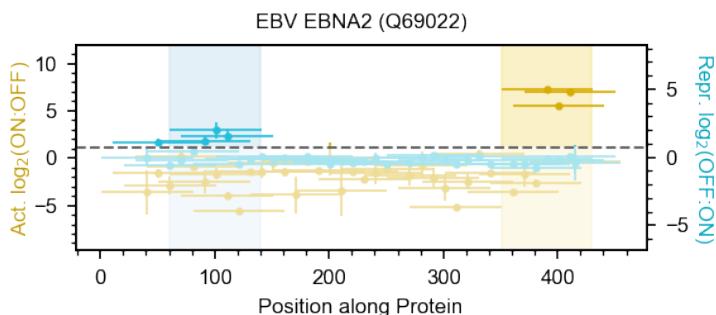
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
MYND_1	401	405	PILFP	Yes	401	410	PILFPDDWYP
CtBP_expanded	415	419	PADLD	No	-	-	
flexi_NRBOX	421	427	SWDYIFE	Yes	421	425	SWDYI

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## EBV EBNA2 (Q69022)

Gene: BYRF1 ; Protein Family: EBNA ; EBV Strain: AG876 (Type 2)



Extended repression domain from residues 51 to 150:

VVGENTGAPAPPQQPPPPPPPPPERRDAWTQEPLPLDMNPLGSDASQGPLASSIRMLCMAQYLLRNARGQQGLLRPLGPQTRSQVTLERQPVHNPR  
QEA

Max tile of repression domain from residues 61 to 140 (estimated 27.3% to 59.3% of cells repressed):

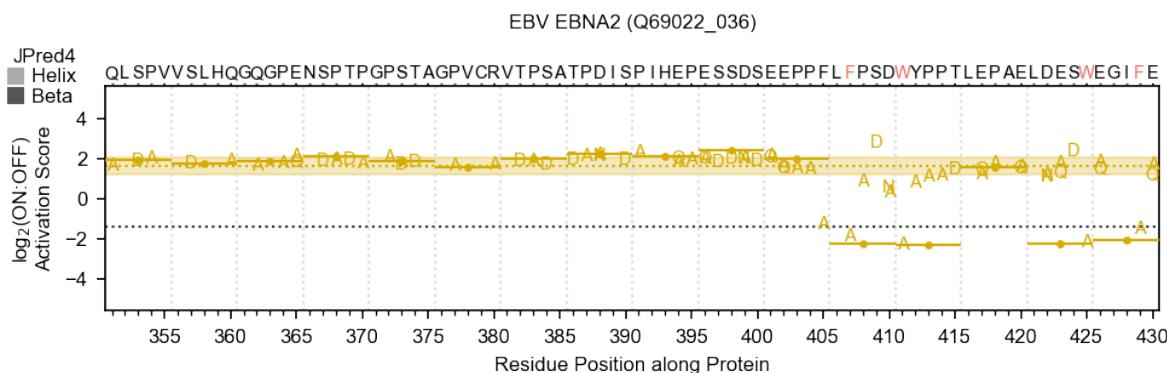
PPQPPPPPPPPPPPERRDAWTQEPLPLDMNPLGSDASQGPLASSIRMLCMAQYLLRNARGQQGLLRPLGPQTRSQVTLER

Extended activation domain from residues 351 to 450:

QLSPVVSLHQGQGPENSPTPGPSTAGPVCRVTPSATPDISPIHEPESSDSEEPFLFPSDWYPPTLEPAELDESWEGIFETTESHSSDEENVGGPSKRP  
R

Max tile of activation domain from residues 351 to 430 (estimated 76.5% to 83.1% of cells activated):

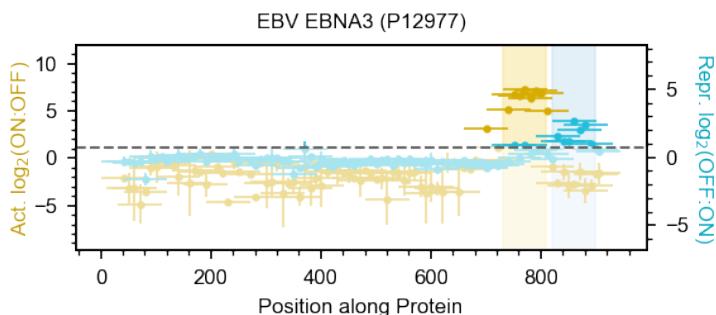
QLSPVVSLHQGQGPENSPTPGPSTAGPVCRVTPSATPDISPIHEPESSDSEEPFLFPSDWYPPTLEPAELDESWEGIFE



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
HP1	354	358	PVVSL	No	-	-	
MYND_1	404	408	PFLFP	Yes	406	415	LFPSDWYPPT
MYND_1	414	418	PTLEP	Yes	406	415	LFPSDWYPPT
CtBP_expanded	418	422	PAELD	Yes	421	430	LDESWEGIFE
flexi_NRBOX	424	430	SWEGIFE	Yes	421	430	LDESWEGIFE

## EBV EBNA3 (P12977)

Gene: BLRF3-BERF1 ; Protein Family: EBNA ; EBV Strain: B95-8 (Type 1)

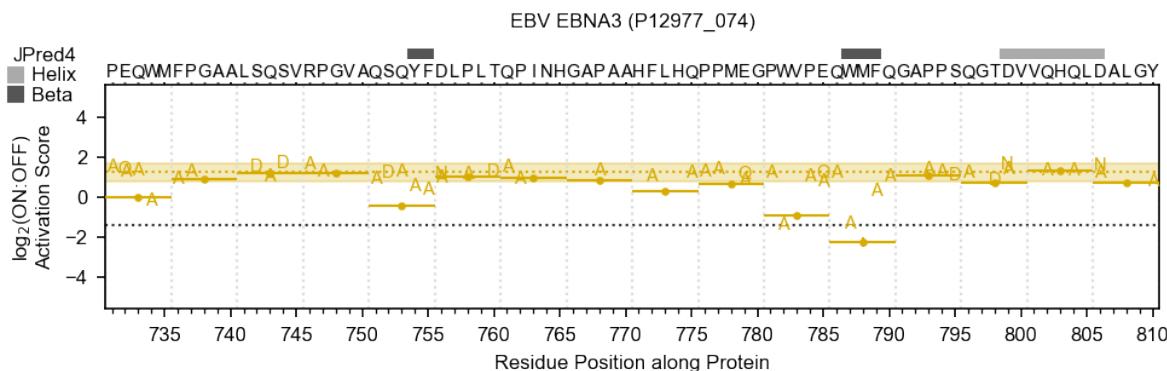


Extended activation domain from residues 701 to 850:

YFDIPLTEPINQGASAAHFLPQQPMEGPLVPEQWMFPGAAALSQSVRPGVAQSQYFDLPLTQPINHGAPAAHFLHQPPMEGPWVPEQWMFQGAPPSQG  
TDVVQHQLDALGYTLHGLNHPGPVSPAVNQYHLSQAAFGGLPIDEDESGEGSD

Max tile of activation domain from residues 731 to 810 (estimated 79.1% to 81.2% of cells activated):

PEQWMFPGAALSQSVRPGVAQSQYFDLPLTQPINHGAPAAHFLHQPPMEGPWVPEQWMFQGAPPSQGTDVVQHQLDALGY



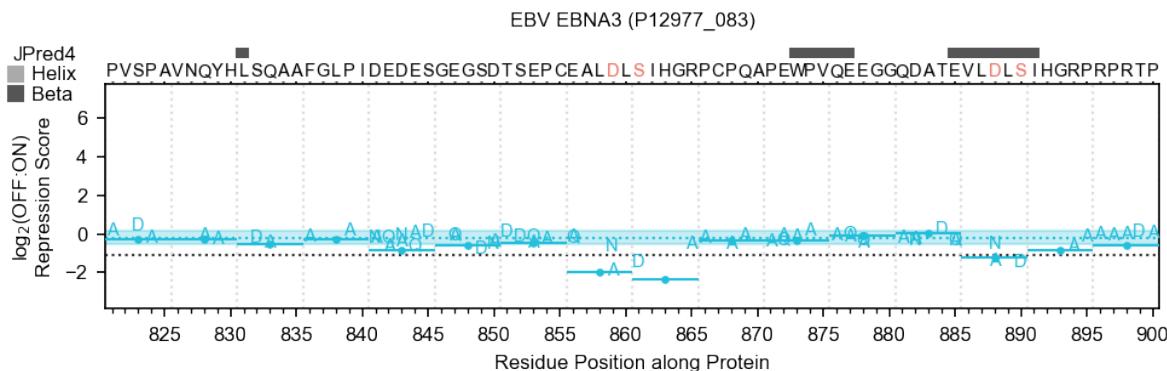
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
Sin3A_SID	769	773	AAHFL	No	-	-	
CSL_BTD_1	781	784	PWVP	No	-	-	
	-	-		No	786	790	QWMFQ

Extended repression domain from residues 791 to 930:

GAPPSSQGTDVVQHQLDALGYTLHGLNHPGPVSPAVNQYHLSQAAFGGLPIDEDESGEGSDTSEPCEALDSIHGRPCPQAPEWPVQEEGGQDATEVL  
DLSIHGRPRPRPTPEWPVQGEQQNVGTPETRRRVVVSAYVHMCQ

Max tile of repression domain from residues 821 to 900 (estimated 60.1% to 62.5% of cells repressed):

PVSPAVNQYHLSQAAFGGLPIDEDESGEGSDTSEPCEALDSIHGRPCPQAPEWPVQEEGGQDATEVL DLSIHGRPRPRPT



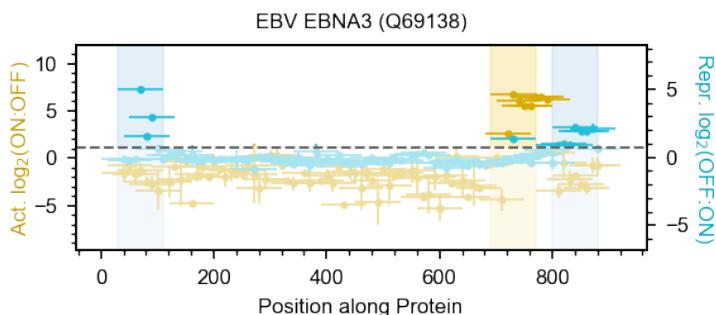
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
Sin3A_SID	834	838	AAFGL	No	-	-	
CtBP_EBNA3	858	861	LDLS	Yes	856	865	EALDLSIHGR
SUMO_SIM_par	884	890	TEVLDLS	Yes	886	890	VLDLS

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## EBV EBNA3 (Q69138)

Gene: BLRF3-BERF1 ; Protein Family: EBNA ; EBV Strain: AG876 (Type 2)

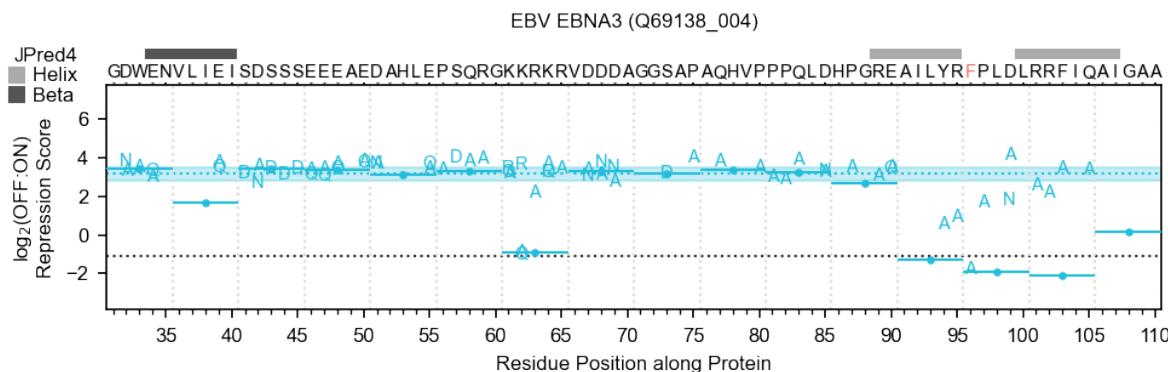


Extended repression domain from residues 31 to 130:

GDWENVNLIEISDSSSEEEAEDAHLEPSQRGKKRKRVDDDAGGSAPAQHVPPPQLDHPGREAILYRFPLDLRRFIQAIGAAATHPDTRAIDQFFGSQISNT

Max tile of repression domain from residues 31 to 110 (estimated 95.9% to 96.6% of cells repressed):

GDWENVNLIEISDSSSEEEAEDAHLEPSQRGKKRKRVDDDAGGSAPAQHVPPPQLDHPGREAILYRFPLDLRRFIQAIGAA



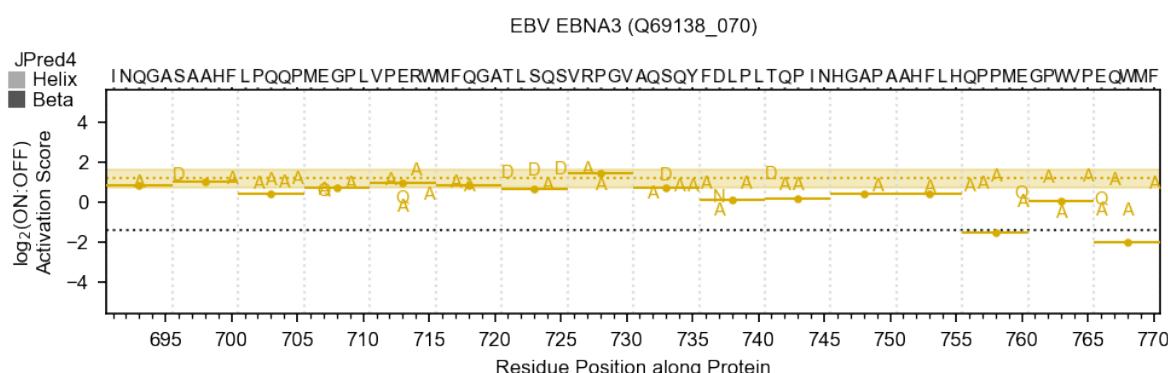
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	32	38	DWENVLI	No	-	-	
SUMO_SIM_par	36	48	VLIEISDSSSEEE	No	-	-	
CtBP_expanded	97	101	PLDLR	Yes	91	105	AILYRFPLDLRRFIQ
flexi_NRBOX	99	105	DLRRFIQ	Yes	91	105	AILYRFPLDLRRFIQ

Extended activation domain from residues 681 to 830:

QYFDIPLTEPINQGASAHHFLPQQPMEGPLVPERWMFQGATLSQSVRPGVAQSQYFDLPLTQPINHGAPAAHFLHQPPMEGPWVPEQWMFQGAPPSQ GTDVVQHQQLDDLGYPLHDLNHPGVVPSPAQNQYHFSQAAFLGLPIDEDESGERS

Max tile of activation domain from residues 691 to 770 (estimated 70.1% to 70.3% of cells activated):

INQGASAAHFLPQQPMEGPLVPERWMFQGATLSQSVRPGVAQSQYFDLPLTQPINHGAPAAHFLHQPPMEGPWVPEQWMF



**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

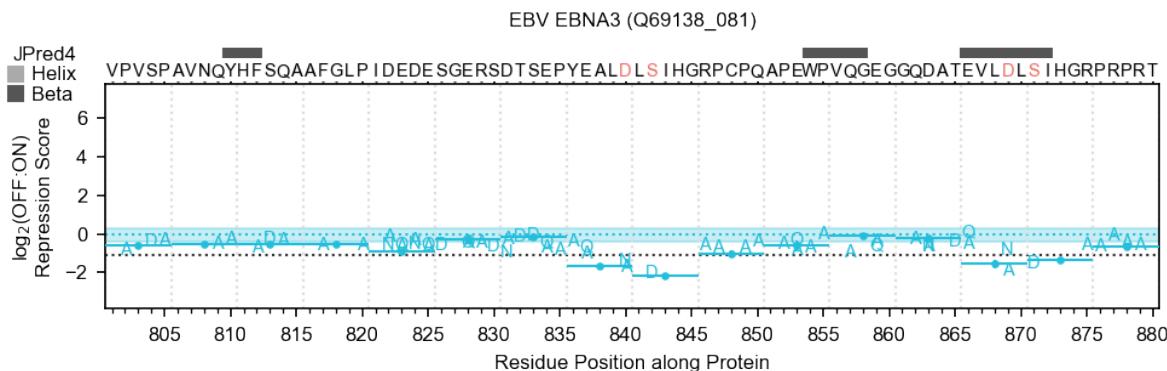
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
Sin3A_SID	697	701	AAHFL	No	-	-	
	-	-		No	756	760	QPPME
CSL_BTD_1	762	765	PWVP	No	-	-	
	-	-		No	766	770	EQWMF

Extended repression domain from residues 771 to 910:

QGAPPSQGTDVVQHQQLDDLGYPLHDLNHPGVPVSPAVNQYHFSQAAFGLPIDEDESGERSDTSEPYEALDLSIHGRPCPQAPEWPVQGEGGQDATEVL  
LDLSIHGRPRPRPTPEWPVQGESGQNVTDHEPRRVVSAIVHMC

Max tile of repression domain from residues 801 to 880 (estimated 46.6% to 53.0% of cells repressed):

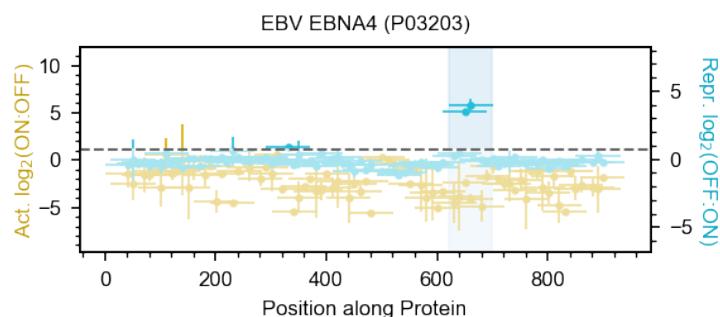
VPVSPAVNQYHFSQAAFGLPIDEDESGERSDTSEPYEALDLSIHGRPCPQAPEWPVQGEGGQDATEVLDLSIHGRPRPT



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
Sin3A_SID	815	819	AAFGL	No	-	-	
CtBP_EBNA3	839	842	LDLS	Yes	836	845	YEALDLSIHG
SUMO_SIM_par	865	871	TEVLDLS	Yes	866	875	EVLDLSIHGR

## EBV EBNA4 (P03203)

Gene: BERP2A-BERF2B ; Protein Family: EBNA ; EBV Strain: B95-8 (Type 1)

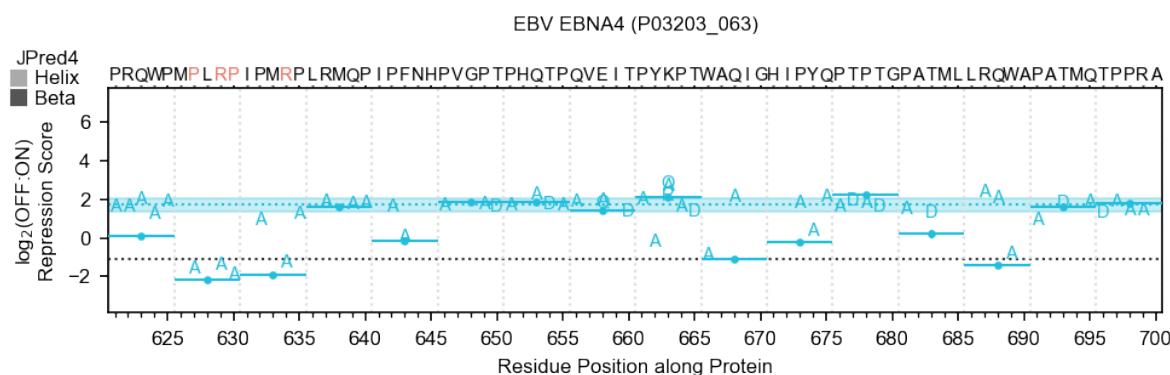


Extended repression domain from residues 611 to 700:

KQSRPPETAAPRQWPMPMLRPIPMRPLRMQPPIP FNHPVGPTPHQTPQVEITPYKPTWAQIGHIPYQPTPTGPATMLLRQWAPATMQTPPRA

Max tile of repression domain from residues 621 to 700 (estimated 82.2% to 92.2% of cells repressed):

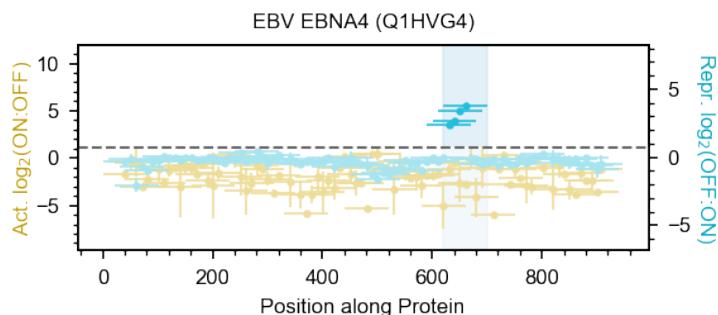
PRQWPMPMLRPIPMRPLRMQPPIP FNHPVGPTPHQTPQVEITPYKPTWAQIGHIPYQPTPTGPATMLLRQWAPATMQTPPRA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	626	635	MPLRPIPMRP
-	-	-		No	666	670	WAQIG
-	-	-		No	686	690	LRQWA
WW_3	696	700	TPPRA	No	-	-	

## EBV EBNA4 (Q1HVG4)

Gene: BERP2A-BERP2B ; Protein Family: EBNA ; EBV Strain: AG876 (Type 2)

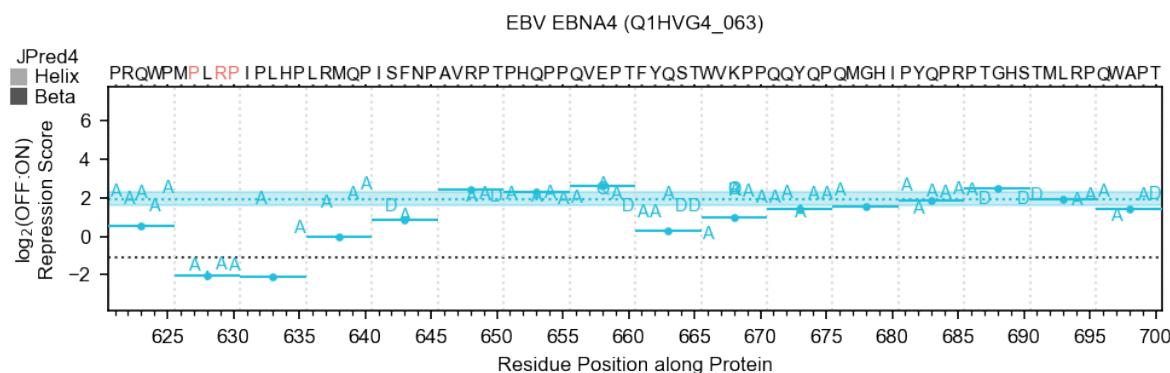


Extended repression domain from residues 591 to 700:

SHAQTPWPVTHPSQTPGGPTTQS LAPETEAPRQWPMPLRP I PLHPLRMQP I SFNPAVRPTPHQPPQVEPTFYQSTWVKPPQQYQPQM GHIPYQPRPT  
GHSTMLRPQWAPT

Max tile of repression domain from residues 621 to 700 (estimated 83.6% to 86.3% of cells repressed):

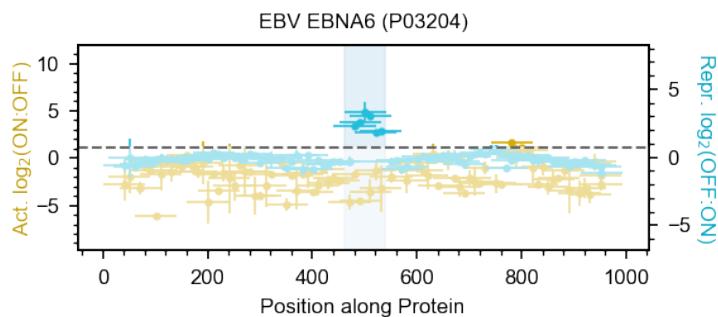
PRQWPMPLRP I PLHPLRMQP I SFNPAVRPTPHQPPQVEPTFYQSTWVKPPQQYQPQM GHIPYQPRPTGHSTMLRPQWAPT



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	626	635	MPLRP I PLH

EBV EBNA6 (P03204)

Gene: BERP3-BERF4 ; Protein Family: EBNA ; EBV Strain: B95-8 (Type 1)



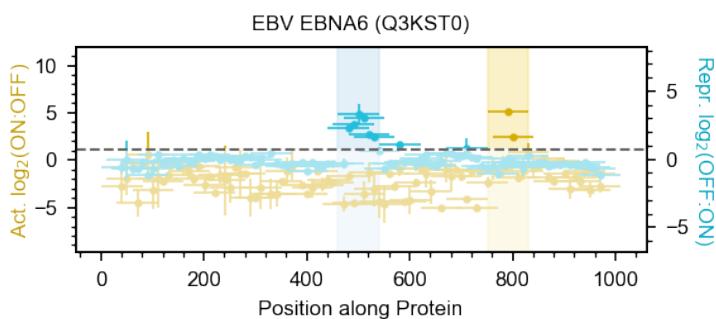
Extended repression domain from residues 441 to 570:

DKAEAQSTPERPGPSEQSSVTVEPAHPTPVEMPMVILHQPPPVPKPVKPTPPPSRRRGACVVYDDDIEVIDVETTEDSSVSQPNKPHRKHQDG  
FQRSGRRQKRAAPPTVSPSDTGPPAVGPPAAG

Max tile of repression domain from residues 461 to 540 (estimated 59.5% to 88.4% of cells repressed):

TVEPAHPTPVEMPMVILHQPPPVPKPVKPTPPPSRRRGACVVYDDDIEVIDVETTEDSSVSQPNKPHRKHQDGFQ

**EBV EBNA6 (Q3KST0)**  
Gene: BERF3-BERF4 ; Protein Family: EBNA ; EBV Strain: GD1 (Type 1)

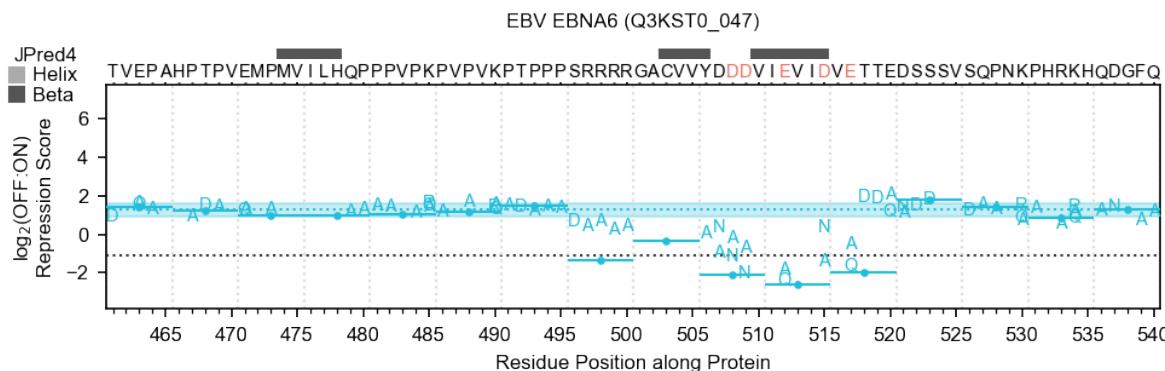


Extended repression domain from residues 441 to 570:

DKAEAQSTPERPGPSEQSSVTVEPAHPTPVEMPMVILHQPPPVPKPVPVKPTPPPSRRRRGACVYDDDIEVIDVETTEDSSVSQPNKPHRKHQDG  
FQRSGRRQKRAAPTVSPSDTGPPAAGPPAAG

Max tile of repression domain from residues 461 to 540 (estimated 59.5% to 88.4% of cells repressed):

TVEPAHPTPVEMPMVILHQPPPVPKPVPVKPTPPPSRRRRGACVYDDDIEVIDVETTEDSSVSQPNKPHRKHQDGQ



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
CtBP_expanded	469	473	PVEMP	No	-	-	
HP1	473	477	PMVIL	No	-	-	
-	-	-		No	496	500	SRRRR
SUMO_SIM_par	512	524	EVIDVETTEDSS	Yes	506	520	YDDDIEVIDVETTE
flexi_NRBOX	509	515	DVIEVID	Yes	506	520	YDDDIEVIDVETTE
SUMO_SIM_par	507	515	DDDIEVID	Yes	506	520	YDDDIEVIDVETTE
SUMO_SIM_anti	507	515	DDDIEVID	Yes	506	520	YDDDIEVIDVETTE

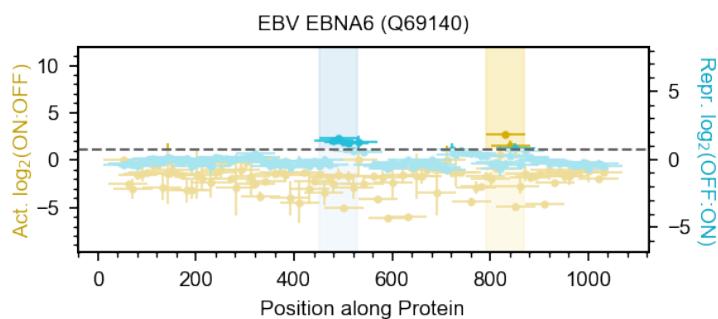
Extended activation domain from residues 751 to 840:

YQGYQEQQPAPQAPYQGYQEQQPPQAPYQGYQEQQPAPQAPYQGYQEPPAHGLQSSSYPGYAGPWTPRSQHPCYRHPWAPWSQDPVHGHTQG

Max tile of activation domain from residues 751 to 830 (estimated 34.6% to 37.2% of cells activated):

YQGYQEQQPAPQAPYQGYQEQQPPQAPYQGYQEQQPAPQAPYQGYQEPPAHGLQSSSYPGYAGPWTPRSQHPCYRHPWAPWS

**EBV EBNA6 (Q69140)**  
 Gene: BERF3-BERF4 ; Protein Family: EBNA ; EBV Strain: AG876 (Type 2)



Extended repression domain from residues 441 to 550:

DEAEEAQSTPERPGPSKQPSEPVEPAHTTPAGRSTVILHEPPREPEAVSFKPPPPPSRRRRGACVYDDDIIEVIDVETTEETTSMQRQQPLGQQPPPP  
 VISTGSAMSS

Max tile of repression domain from residues 451 to 530 (estimated 25.8% to 37.2% of cells repressed):

ERPGPSKQPSEPVEPAHTTPAGRSTVILHEPPREPEAVSFKPPPPPSRRRRGACVYDDDIIEVIDVETTEETTSMQRQ

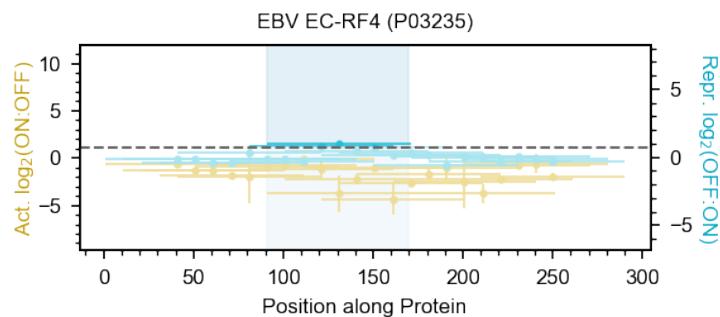
Extended activation domain from residues 791 to 880:

EEPRLPPQAPFVGDYGFVQIPSAQWEPHPSQGYQGHIDPQLPAALDLGPEQPRFPQDPYVYSGGQLSSCPGYAGPWPSRPQHPRYRHTLA

Max tile of activation domain from residues 791 to 870 (estimated 6.0% to 8.5% of cells activated):

EEPRLPPQAPFVGDYGFVQIPSAQWEPHPSQGYQGHIDPQLPAALDLGPEQPRFPQDPYVYSGGQLSSCPGYAGPWPSRP

EBV EC-RF4 (P03235)  
Gene: EC-RF4 ; Protein Family: EC-RF4



Extended repression domain from residues 81 to 170:

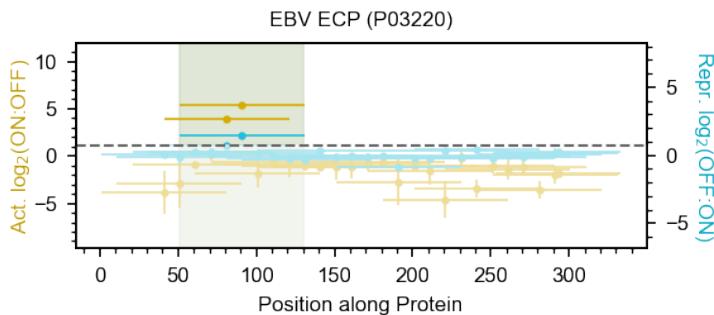
RQQDAPIAPGLLPCRPEDAGYLQDQVSLVGGRGEALLPQTLDIEGQGLVGGPGAVFTPDR

Max tile of repression domain from residues 91 to 170 (estimated 15.3% to 23.8% of cells repressed):

LLPCRPEDAGYLQDQVSLVGGRGEALLPQTLDIEGQGLVGGPGAVFTPDR

## EBV ECP (P03220)

Gene: BGLF3 ; Protein Family: ECP



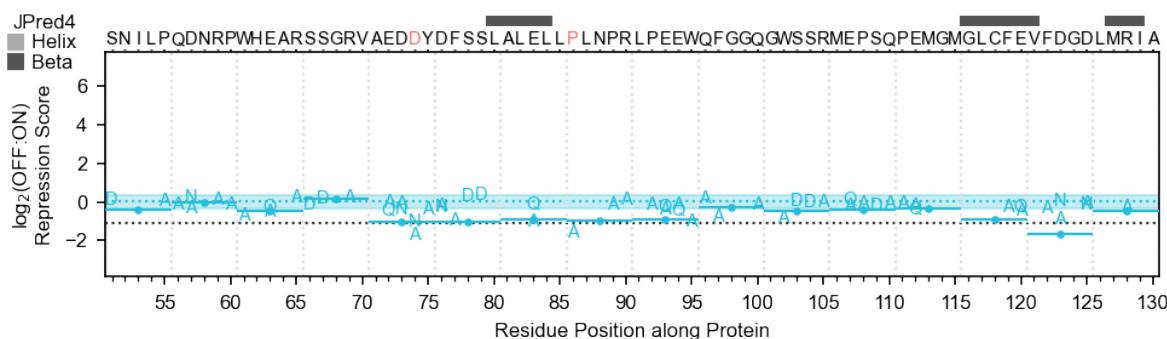
Extended repression domain from residues 41 to 130:

ETPLKSFLVSNILPQDNRPWHEARSSGRVAEDDYDFSSLALELLPLNPRLPPEWQFGGQGWSSRMEPSQPEMGMLCFEVFDGDLMRIA

Max tile of repression domain from residues 51 to 130 (estimated 25.5% to 31.9% of cells repressed):

SNILPQDNRPWHEARSSGRVAEDDYDFSSLALELLPLNPRLPPEWQFGGQGWSSRMEPSQPEMGMLCFEVFDGDLMRIA

## EBV ECP (P03220\_006)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	121	125	VFDGD

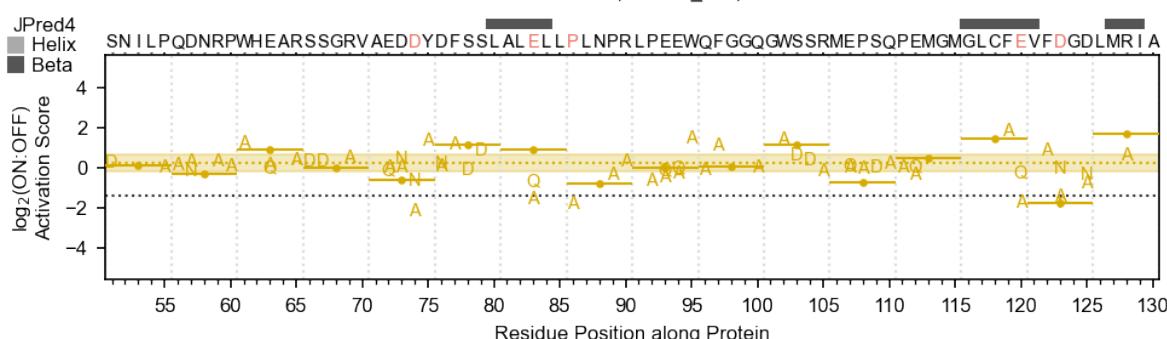
Extended activation domain from residues 41 to 130:

ETPLKSFLVSNILPQDNRPWHEARSSGRVAEDDYDFSSLALELLPLNPRLPPEWQFGGQGWSSRMEPSQPEMGMLCFEVFDGDLMRIA

Max tile of activation domain from residues 51 to 130 (estimated 41.2% to 43.4% of cells activated):

SNILPQDNRPWHEARSSGRVAEDDYDFSSLALELLPLNPRLPPEWQFGGQGWSSRMEPSQPEMGMLCFEVFDGDLMRIA

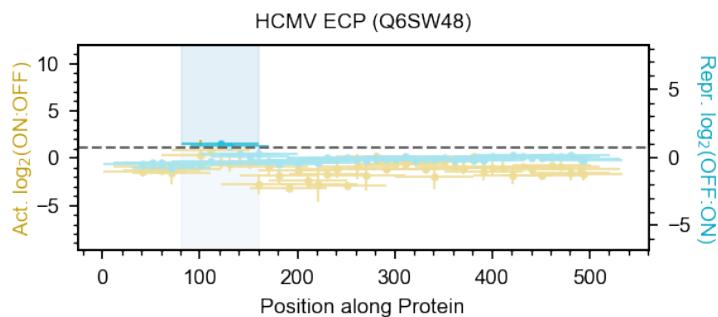
## EBV ECP (P03220\_006)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	121	125	VFDGD

HCMV ECP (Q6SW48)

Gene: UL95 ; Protein Family: ECP



Extended repression domain from residues 81 to 170:

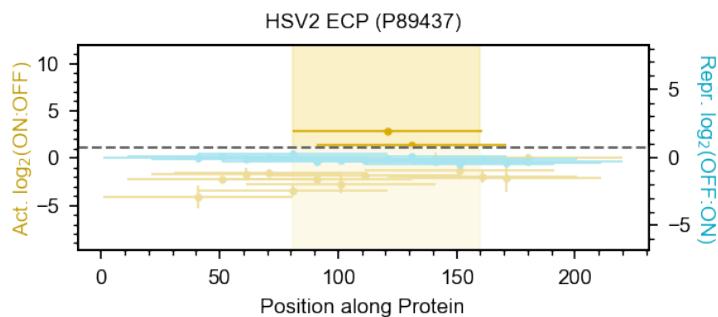
PSTAVRSPGSAGVSTSLSVERMVELSAQSPAADFSVSEAWRFEEAVNMALVACEAVSPYDRFRLIETPDENFLVTNVIPRESAEVPVL

Max tile of repression domain from residues 81 to 160 (estimated 18.2% to 20.2% of cells repressed):

PSTAVRSPGSAGVSTSLSVERMVELSAQSPAADFSVSEAWRFEEAVNMALVACEAVSPYDRFRLIETPDENFLVTNVIPRESAEVPVL

HSV2 ECP (P89437)

Gene: UL14 ; Protein Family: ECP



Extended activation domain from residues 81 to 170:

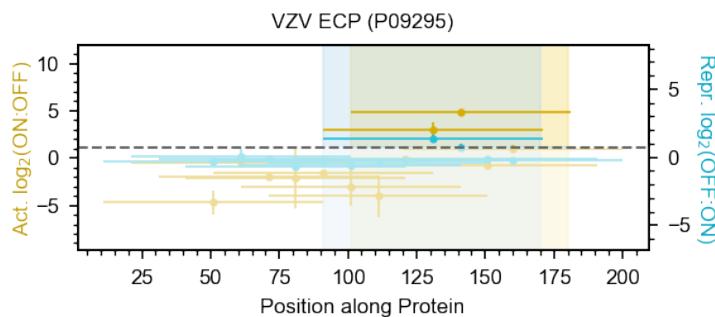
VEEQAAARRDFLTAHRRYLDPALSERLDAADDRLADQEEQLEEEAANASLWGDGDLADGWMSPGDS DLLVMWQLTSAPK VHTDAPS RPGSR

Max tile of activation domain from residues 81 to 160 (estimated 6.8% to 7.7% of cells activated):

VEEQAAARRDFLTAHRRYLDPALSERLDAADDRLADQEEQLEEEAANASLWGDGDLADGWMSPGDS DLLVMWQLTSAPKVH

VZV ECP (P09295)

Gene: ORF46 ; Protein Family: ECP



Extended repression domain from residues 91 to 180:

IQQILNTNRRYIAPDFIRGLDKTEDDNTDNIDRLEDAVGPNIEHENHTWFGEDDEALLTQWMLTTHPPTSKYLQLQDLCVPTTIPTDMNQ

Max tile of repression domain from residues 91 to 170 (estimated 20.7% to 34.3% of cells repressed):

IQQILNTNRRYIAPDFIRGLDKTEDDNTDNIDRLEDAVGPNIEHENHTWFGEDDEALLTQWMLTTHPPTSKYLQLQDLCV

Extended activation domain from residues 91 to 180:

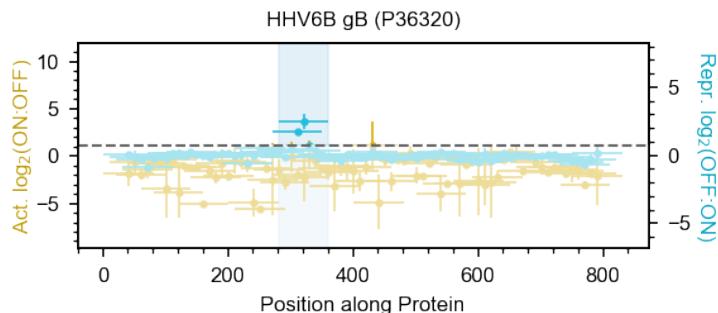
IQQILNTNRRYIAPDFIRGLDKTEDDNTDNIDRLEDAVGPNIEHENHTWFGEDDEALLTQWMLTTHPPTSKYLQLQDLCVPTTIPTDMNQ

Max tile of activation domain from residues 101 to 180 (estimated 26.9% to 37.7% of cells activated):

YIAPDFIRGLDKTEDDNTDNIDRLEDAVGPNIEHENHTWFGEDDEALLTQWMLTTHPPTSKYLQLQDLCVPTTIPTDMNQ

## HHV6B gB (P36320)

Gene: U39 ; Protein Family: gB

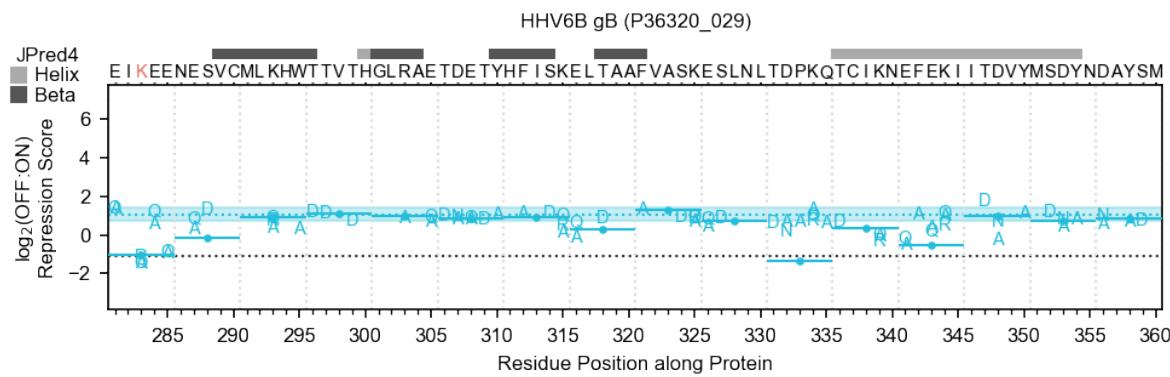


Extended repression domain from residues 271 to 370:

LEKGDTLFSWEIKEENESVCMKLKHWTIVTHGLRAETDETYHFISKELTAAFVASKESLNLTDPKQTCIKNEFEKIITDVYMSDYNDAYSMMNGSYQIFKTT

Max tile of repression domain from residues 281 to 360 (estimated 42.2% to 70.6% of cells repressed):

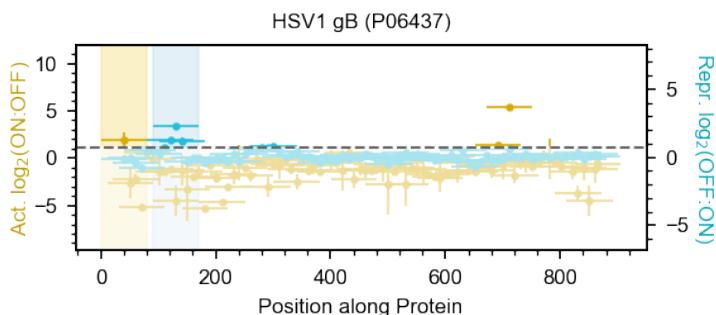
EIKEENESVCMKLKHWTIVTHGLRAETDETYHFISKELTAAFVASKESLNLTDPKQTCIKNEFEKIITDVYMSDYNDAYSMM



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	282	285	IKEE	No	-	-	
SUMO_rev	326	336	ESLNLTDPKQT	Yes	331	335	TDPKQ
SUMO_for	338	341	IKNE	No	-	-	
flexi_NRBOX	341	347	EFEKIIT	No	-	-	

## HSV1 gB (P06437)

Gene: UL27 ; Protein Family: gB



Extended activation domain from residues 1 to 80:

MHQGAPSWGRRWFVVWALLGLTLGVLVASAAPTSPGTPGVAAATQAANGGPATPAPPPLGAAPTGDPKPKKNKKPKNPTP

Max tile of activation domain from residues 1 to 80 (estimated 2.7% to 6.8% of cells activated):

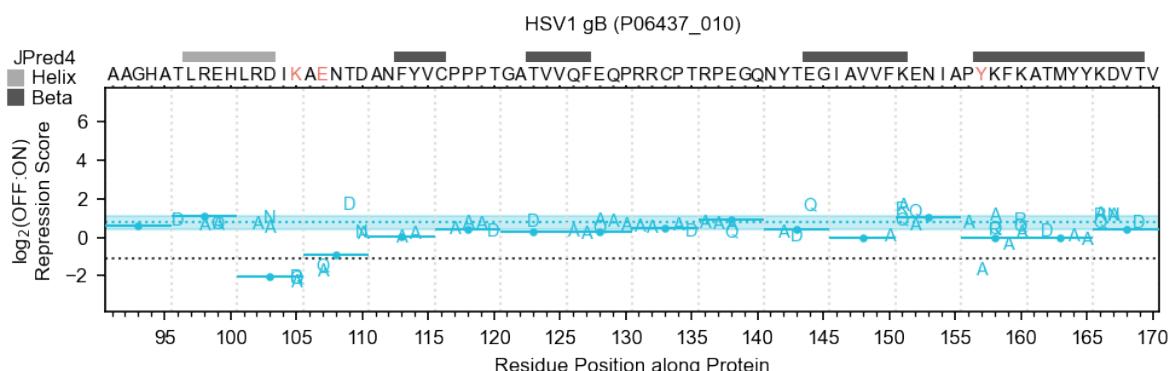
MHQGAPSWGRRWFVVWALLGLTLGVLVASAAPTSPGTPGVAAATQAANGGPATPAPPPLGAAPTGDPKPKKNKKPKNPTP

Extended repression domain from residues 81 to 180:

PRPAGDNATVAAGHATLREHLRDIKAENTDANFYVCPPPTGATVVQFEQPRRCPTRPEGQNYTEGIAVVFKENIAPYKFKATMYYKDVTVSQVWFGHRS  
S

Max tile of repression domain from residues 91 to 170 (estimated 51.7% to 52.7% of cells repressed):

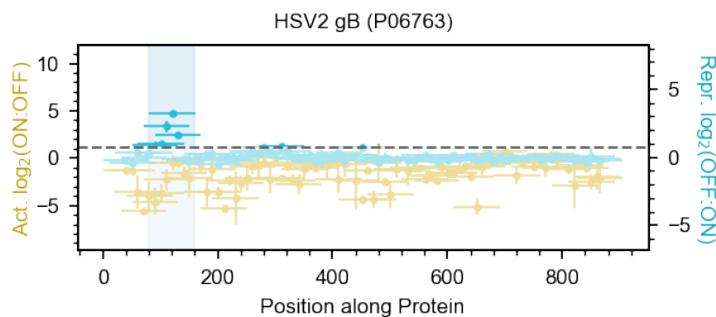
AAGHATLREHLRDIKAENTDANFYVCPPPTGATVVQFEQPRRCPTRPEGQNYTEGIAVVFKENIAPYKFKATMYYKDVTV



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_rev	99	106	EHLRDIKA	Yes	101	105	LRDIK
SUMO_for	104	107	IKAE	Yes	101	105	LRDIK
SUMO_SIM_anti	143	150	TEGIAVVF	No	-	-	
flexi_NRBOX	145	151	GIAVVFK	No	-	-	

## HSV2 gB (P06763)

Gene: UL27 ; Protein Family: gB

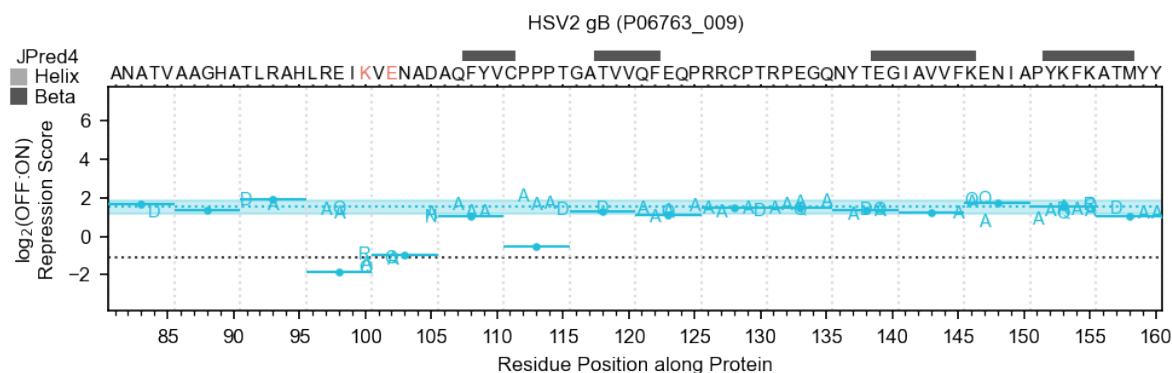


Extended repression domain from residues 51 to 170:

PPVPSATTKARKRKTKKKPDKPEATPPPDANATVAAGHATLRAHLREIKVENADAQFYVCPPPTGATVVQFEQPRRCPTRPEGQNYTEGIAVVFKENIAPYKFKATMYYKDVTSQVWF

Max tile of repression domain from residues 81 to 160 (estimated 74.7% to 75.2% of cells repressed):

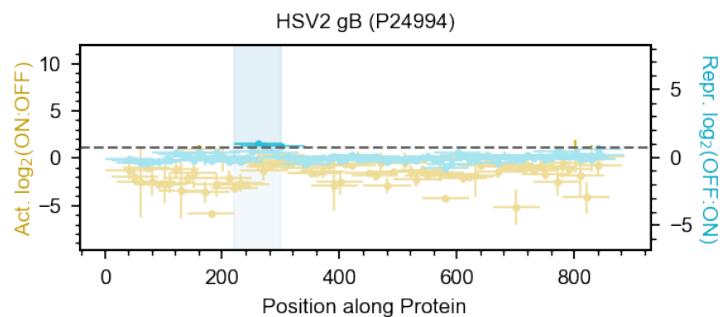
ANATVAAGHATLRAHLREIKVENADAQFYVCPPPTGATVVQFEQPRRCPTRPEGQNYTEGIAVVFKENIAPYKFKATMYY



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	99	102	IKVE	Yes	96	100	LREIK
SUMO_SIM_anti	138	145	TEGIAVVF	No	-	-	
flexi_NRBOX	140	146	GIAVVF	No	-	-	

HSV2 gB (P24994)

Gene: UL27 ; Protein Family: gB



Extended repression domain from residues 221 to 310:

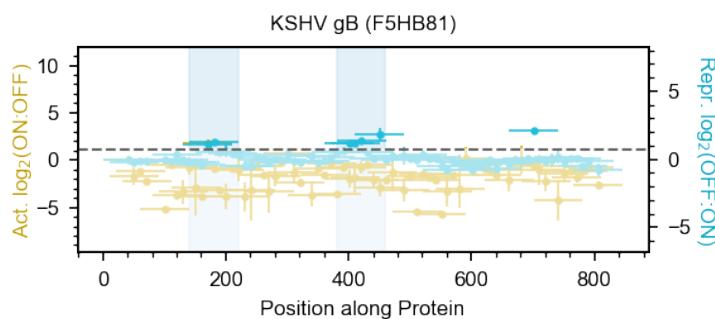
ATRTSRGWHTTDLKYNPARVEAFHRYGTTVNCIVEEVEARSVYPYDEFVLATGDFVYMSPFYGYRDGSHGEHTAYAADRFRQVDGYYERD

Max tile of repression domain from residues 221 to 300 (estimated 15.7% to 21.4% of cells repressed):

ATRTSRGWHTTDLKYNPARVEAFHRYGTTVNCIVEEVEARSVYPYDEFVLATGDFVYMSPFYGYRDGSHGEHTAYAADRF

KSHV gB (F5HB81)

Gene: ORF8 ; Protein Family: gB



Extended repression domain from residues 131 to 220:

SAITNKYELPRPVPLYEISHMDSTYQCFSSMKVNNGVENTFTDRDDVNTTVFLQPVEGLTDNIQRYFSQPVIYAEPGWFPGIYRVRTTV

Max tile of repression domain from residues 141 to 220 (estimated 23.6% to 24.7% of cells repressed):

RPVPLYEISHMDSTYQCFSSMKVNNGVENTFTDRDDVNTTVFLQPVEGLTDNIQRYFSQPVIYAEPGWFPGIYRVRTTV

Extended repression domain from residues 361 to 460:

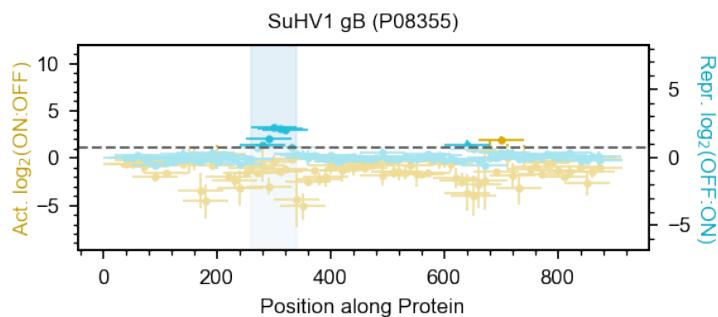
SCLTSDINTTLNASKAKLASTHVPNGTVQYFHTTGGLYLVWQPM SAINLTHAQGDSGNPTSSPPPSASPM TTSASRRKRRSASTAAAGGGSTDNL SYT Q

Max tile of repression domain from residues 381 to 460 (estimated 25.7% to 28.0% of cells repressed):

THVPNGTVQYFHTTGGLYLVWQPM SAINLTHAQGDSGNPTSSPPPSASPM TTSASRRKRRSASTAAAGGGSTDNL SYT Q

## SuHV1 gB (P08355)

Gene: - ; Protein Family: gB

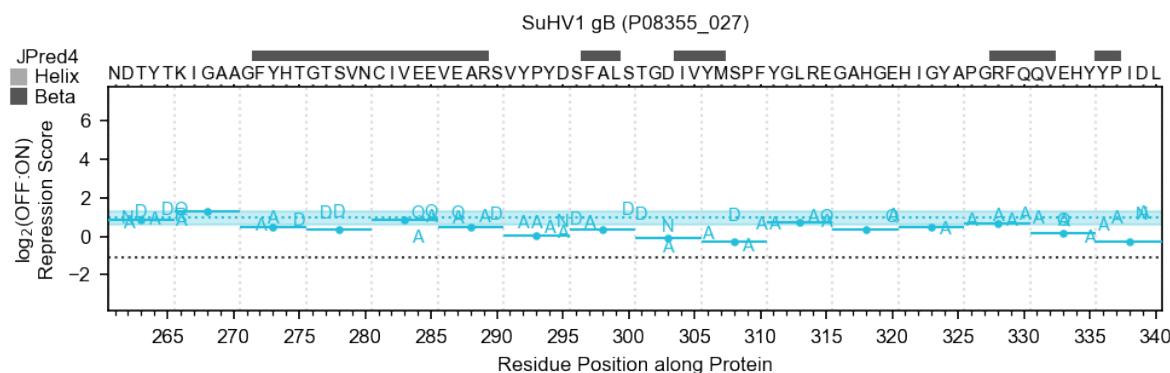


Extended repression domain from residues 231 to 370:

TAFDRDENPVEDLRLPSRLNALGTRGWHTNDTYTKIGAAGFYHTGTSVNCIVEEVEARSVYPYDSFALSTGDIVYMSPFYGLREGAHGEHIGYAPGRFQQVEHYYPIDL

Max tile of repression domain from residues 261 to 340 (estimated 47.3% to 50.7% of cells repressed):

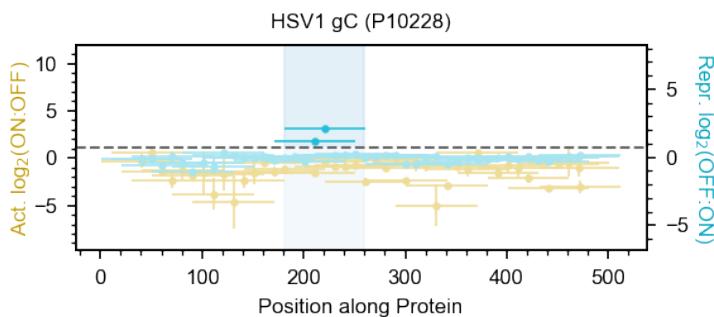
NDTYTKIGAAGFYHTGTSVNCIVEEVEARSVYPYDSFALSTGDIVYMSPFYGLREGAHGEHIGYAPGRFQQVEHYYPIDL



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	278	284	SVNCIVE	No	-	-	

## HSV1 gC (P10228)

Gene: UL44 ; Protein Family: gC



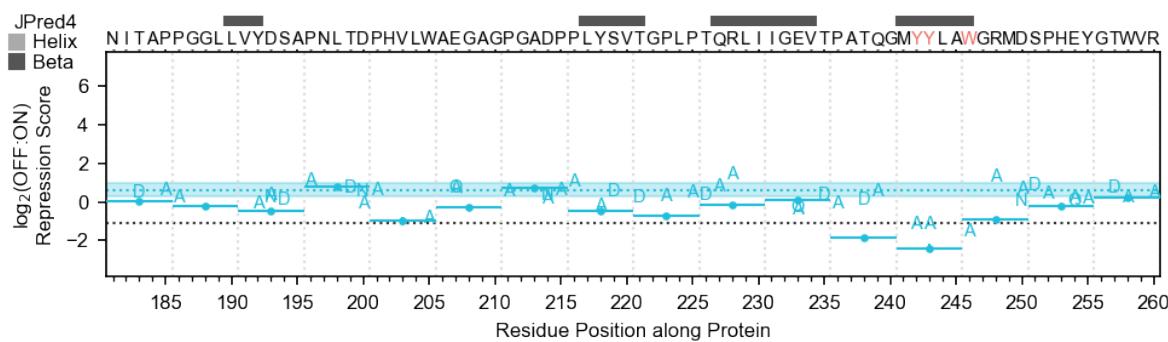
Extended repression domain from residues 171 to 260:

PAPDLEEVLTINITAPPGGLLVYDSAPNLTDPHVLWAEGAGPGADPPLYSVTGPLPTQRLIIGEVTPATQGMYYLAWGRMDSPHEYGTWVR

Max tile of repression domain from residues 181 to 260 (estimated 44.5% to 46.6% of cells repressed):

NITAPPGGLLVYDSAPNLTDPHVLWAEGAGPGADPPLYSVTGPLPTQRLIIGEVTPATQGMYYLAWGRMDSPHEYGTWVR

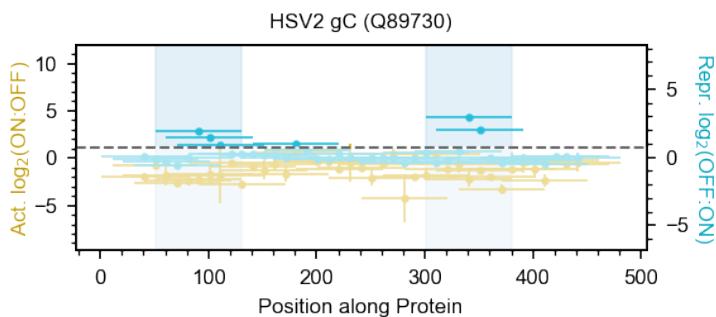
## HSV1 gC (P10228\_019)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
WW_1	215	218	PPLY	No	-	-	
	-	-		No	236	245	PATQGMYYLA

## HSV2 gC (Q89730)

Gene: UL44 ; Protein Family: gC



Extended repression domain from residues 51 to 150:

RNASAPRTTPPPQPRKATSKASTAKPAPPKTGPPKTSSSEPVRNCNRHDPLARYGSRVQIRCRCFPNSTRTEFRLQIWRYATATDAEIGTAPSLEEVMV  
N

Max tile of repression domain from residues 51 to 130 (estimated 35.8% to 45.4% of cells repressed):

RNASAPRTTPPPQPRKATSKASTAKPAPPKTGPPKTSSSEPVRNCNRHDPLARYGSRVQIRCRCFPNSTRTEFRLQIWRY

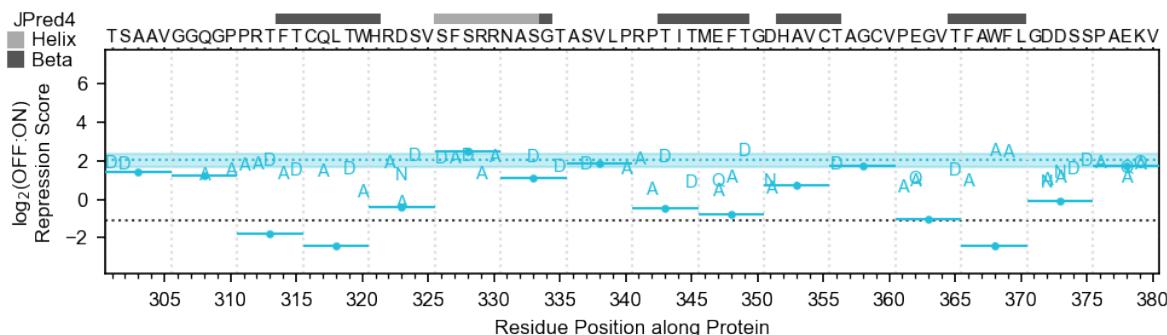
Extended repression domain from residues 301 to 390:

TSAAVGGQQGPPRTFTCQLTWHRDSVSFSRRNASGTASVLPRPTITMEFTGDHAVCTAGCVPEGVTFAWFLGDDSSPAEKVAVASQTSCGR

Max tile of repression domain from residues 301 to 380 (estimated 67.1% to 71.2% of cells repressed):

TSAAVGGQQGPPRTFTCQLTWHRDSVSFSRRNASGTASVLPRPTITMEFTGDHAVCTAGCVPEGVTFAWFLGDDSSPAEKV

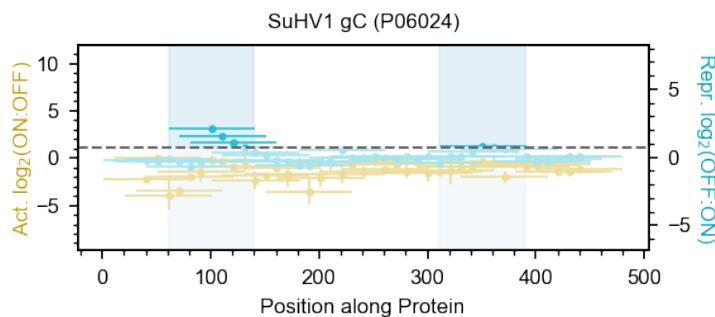
## HSV2 gC (Q89730\_031)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
WW_3	309	313	GPPRT	Yes	311	320	PRTFTCQLTW
flexi_NRBOX	365	371	TFAWFLG	Yes	366	370	FAWFL

## SuHV1 gC (P06024)

Gene: - ; Protein Family: gC

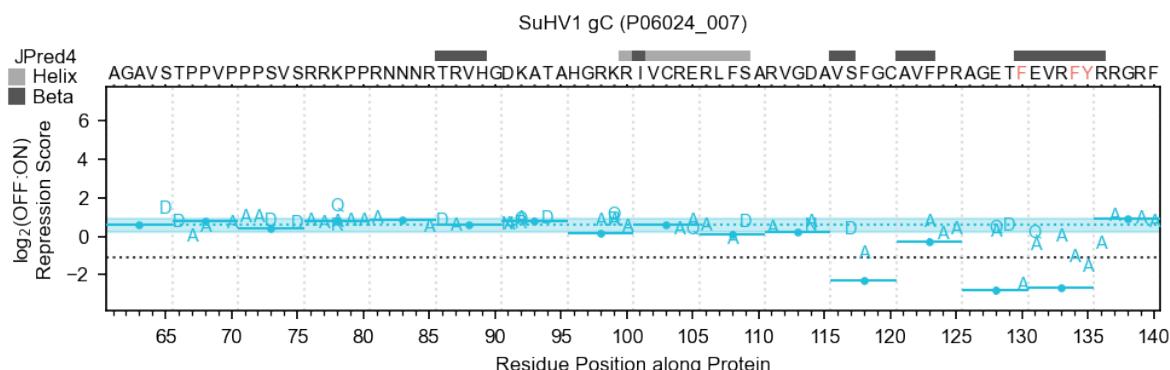


Extended repression domain from residues 61 to 160:

AGAVSTPPVPPPSVSRRKPPRNNNRTRVHGDKATAHGRKRIVCRERLFSARVGDAVSFGCAVFPRAGETFEVRFYRRGRFRSPDADPEYFDEPPRPEL  
PR

Max tile of repression domain from residues 61 to 140 (estimated 47.1% to 48.2% of cells repressed):

AGAVSTPPVPPPSVSRRKPPRNNNRTRVHGDKATAHGRKRIVCRERLFSARVGDAVSFGCAVFPRAGETFEVRFYRRGRF



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
WW_3	78	82	KPPRN	No	-	-	
	-	-		No	116	120	VSFGC
	-	-		No	126	135	AGETFEVRFY

Extended repression domain from residues 311 to 400:

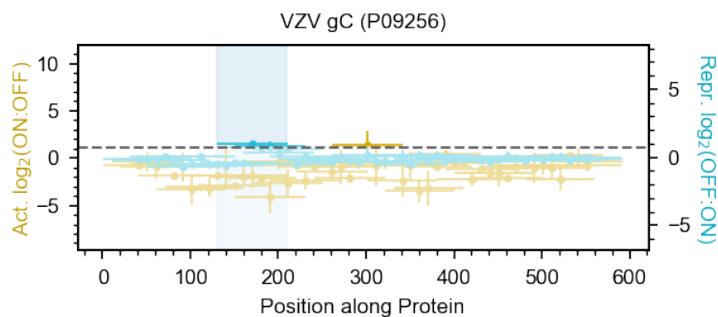
LAAADAADALAPSLRCEAVWYRDSVASQRFSEALRPHVYHPAAVSVRFVEGFAVCDGLCPPEARLAWSDHAADTVYHLGACAEHPGLN

Max tile of repression domain from residues 311 to 390 (estimated 14.5% to 18.6% of cells repressed):

LAAADAADALAPSLRCEAVWYRDSVASQRFSEALRPHVYHPAAVSVRFVEGFAVCDGLCPPEARLAWSDHAADTVYHLG

VZV gC (P09256)

Gene: ORF14 ; Protein Family: gC



Extended repression domain from residues 131 to 230:

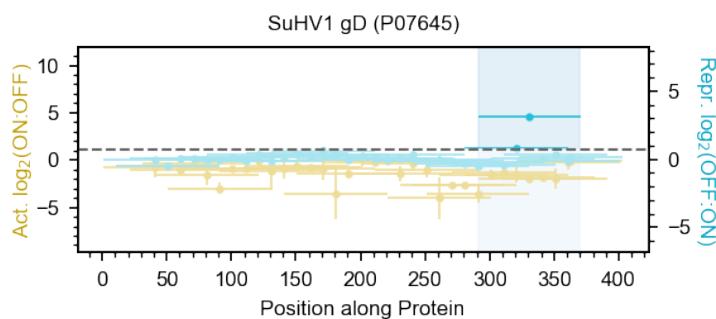
VAPTSAA SRKPDPAVAPTSAA TRKPDPAVAPTSAA SRKPDPAANTQHSQPPFLYENIQC VHG GIQSIPYFHTFIM PCYMR LTTGQQAFKQQQKTYEQY  
S

Max tile of repression domain from residues 131 to 210 (estimated 17.7% to 21.1% of cells repressed):

VAPTSAA SRKPDPAVAPTSAA TRKPDPAVAPTSAA SRKPDPAANTQHSQPPFLYENIQC VHG GIQSIPYFHTFIM PCYMR

SuHV1 gD (P07645)

Gene: - ; Protein Family: gD



Extended repression domain from residues 281 to 370:

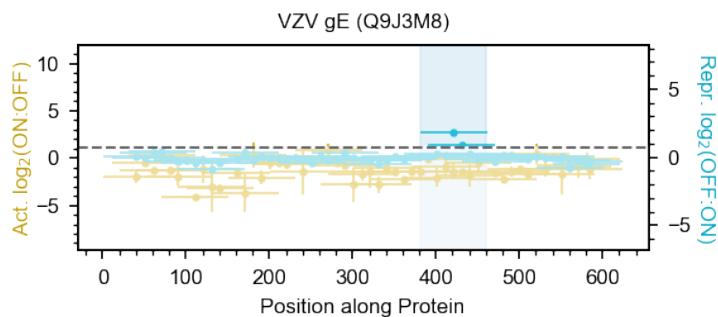
PEPAPATPAPPDRLEPATRDHAAGGRPTPRPPRPTPHRPFAPPAVVPSGWPQPAEPFQPRTPAAPGVSRHRSIVGTGTAMGALLVGV

Max tile of repression domain from residues 291 to 370 (estimated 70.4% to 75.8% of cells repressed):

PDRLEPATRDHAAGGRPTPRPPRPTPHRPFAPPAVVPSGWPQPAEPFQPRTPAAPGVSRHRSIVGTGTAMGALLVGV

VZV gE (Q9J3M8)

Gene: ORF68 ; Protein Family: gE

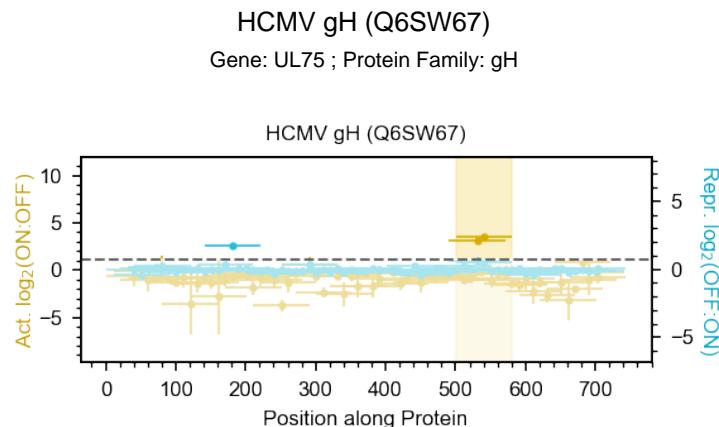


Extended repression domain from residues 381 to 470:

VPIDPTCQPMRLYSTCLYHPNAPQCLSHMNSGCTFTSPHLAQRVASTVYQNCEHADNYTAYCLGISHMEPSFGLILHDGGTTLKFVDTPE

Max tile of repression domain from residues 381 to 460 (estimated 34.2% to 41.5% of cells repressed):

VPIDPTCQPMRLYSTCLYHPNAPQCLSHMNSGCTFTSPHLAQRVASTVYQNCEHADNYTAYCLGISHMEPSFGLILHDGG



Extended activation domain from residues 491 to 580:

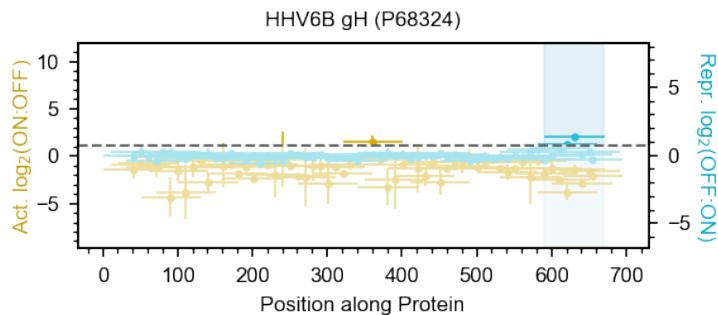
ETGLCSLAELSHFTQLLAHPHHEYLSDLYTPCSSSGRRDHSLERLTRLFPDATVPATVPAALSLSTMQPSTLETFPDLFCLPLGESFSA

Max tile of activation domain from residues 501 to 580 (estimated 9.7% to 15.8% of cells activated):

SHFTQLLAHPHHEYLSDLYTPCSSSGRRDHSLERLTRLFPDATVPATVPAALSLSTMQPSTLETFPDLFCLPLGESFSA

HHV6B gH (P68324)

Gene: U48 ; Protein Family: gH



Extended repression domain from residues 581 to 670:

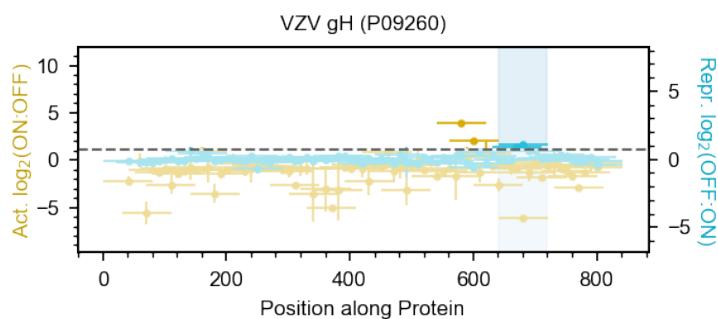
YKYAGQDLLVLRNISSQTCEFCQSVVMEYDDIDGPLQYIYIKNIDELKTLDPNNNLLVPNTRTHYLLLAKNGSVFEMSEVGIDIDQVSI

Max tile of repression domain from residues 591 to 670 (estimated 26.7% to 28.2% of cells repressed):

LRNISSQTCEFCQSVVMEYDDIDGPLQYIYIKNIDELKTLDPNNNLLVPNTRTHYLLLAKNGSVFEMSEVGIDIDQVSI

VZV gH (P09260)

Gene: ORF37 ; Protein Family: gH



Extended repression domain from residues 631 to 720:

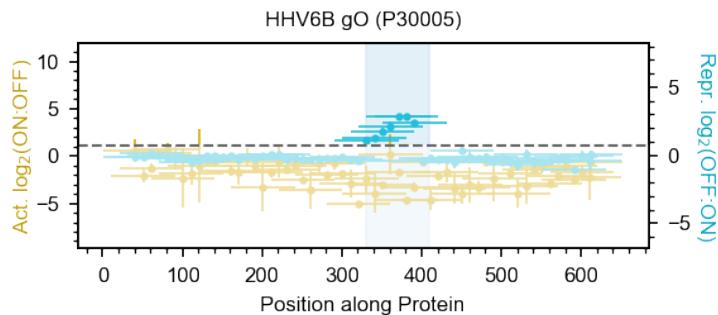
AKDLHILHTHVPEVFTCQDAAARNGEYVLILPAVQGHSYVITRNKPQRGLVYSLADVDVYNPISVVYLSRDTCVSEHGVETVALPHPDN

Max tile of repression domain from residues 641 to 720 (estimated 17.2% to 25.2% of cells repressed):

VPEVFTCQDAAARNGEYVLILPAVQGHSYVITRNKPQRGLVYSLADVDVYNPISVVYLSRDTCVSEHGVETVALPHPDN

## HHV6B gO (P30005)

Gene: U47 ; Protein Family: gO

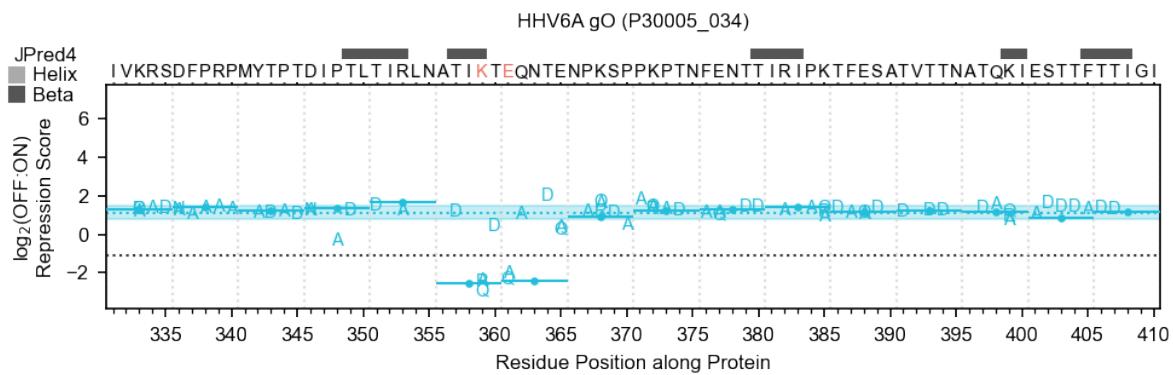


Extended repression domain from residues 291 to 430:

IPTPEPPPVTKNSTKLHTDTIKVTPNPTITQTTESIKKIVKRSDFPRPMYTPTDIPLTIRLNATIKTEQNTEPKSPPKPTNFENTTIRIPKTFESATVTTNA  
TQKIESTTFTTIGIKEINGNTYSSPKNSIYLKSK

Max tile of repression domain from residues 331 to 410 (estimated 62.7% to 69.2% of cells repressed):

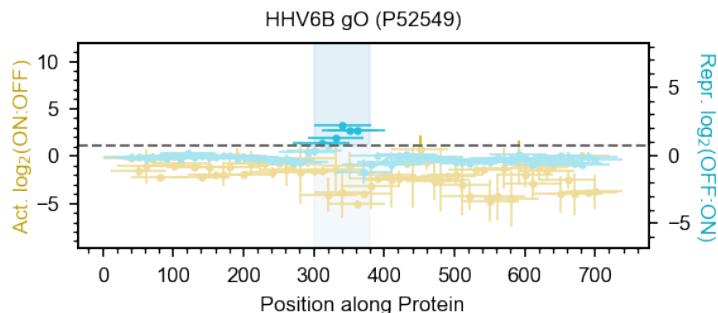
IVKRSDFPRPMYTPTDIPLTIRLNATIKTEQNTEPKSPPKPTNFENTTIRIPKTFESATVTTNATQKIESTTFTTIGI



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	358	361	IKTE	Yes	356	365	ATIKTEQNTE

## HHV6B gO (P52549)

Gene: U47 ; Protein Family: gO

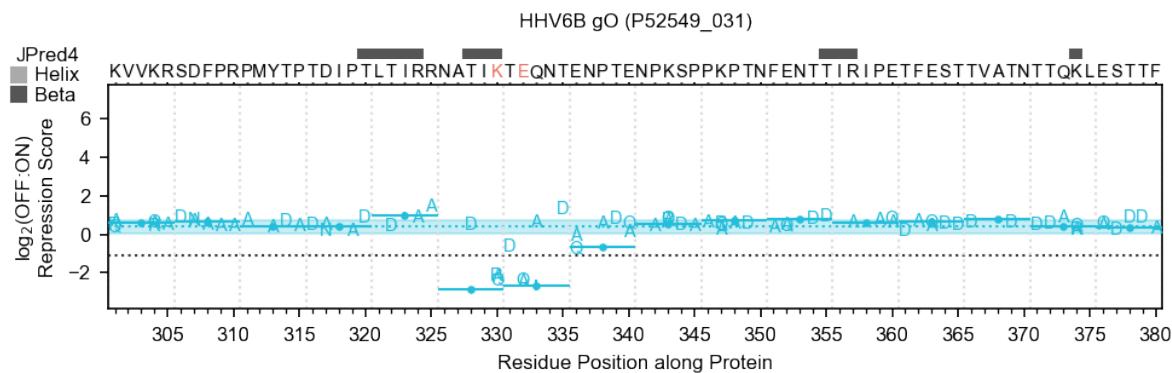


Extended repression domain from residues 271 to 400:

TKNFTELQTDI**K**VTPNPTITAQTTESIKKVVKRSDFPRPMYPTDIPTLTIRRNATIKTEQNTEQNTENPTENPKSPPKPTNFENTTIRIPETFESTTVATNTTQKL  
ESTTFATTIGIEEISDNIYSSPKNS

Max tile of repression domain from residues 301 to 380 (estimated 49.6% to 49.9% of cells repressed):

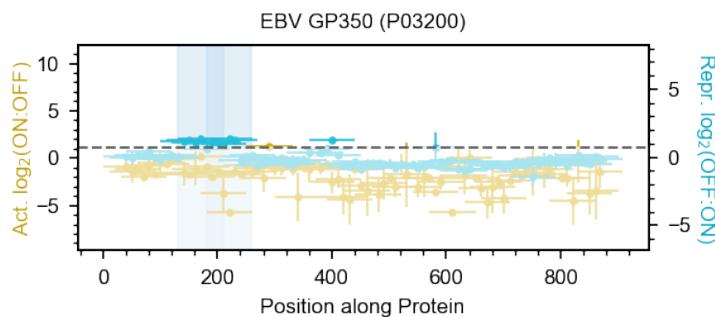
KVVKRSDFPRPMYPTDIPTLTIRRNATIKTEQNTEQNTENPTENPKSPPKPTNFENTTIRIPETFESTTVATNTTQKLESTTF



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	329	332	IKTE	Yes	326	335	NATIKTEQNT

EBV GP350 (P03200)

Gene: BLLF1 ; Protein Family: GP350



Extended repression domain from residues 101 to 210:

ELALTMRSKKLPINVTTGEEQQQSLESVDVYFQDVF GTMWCHHAEMQNPNPVYLIPETVPYIKWDNCNSTNITAVVRAQGLDVTPLSLPTSAQDSNFSVKTEMLGNEIDIE

Max tile of repression domain from residues 131 to 210 (estimated 26.9% to 27.0% of cells repressed):

YFQDVFGTMWCHHAEMQNPNPVYLIPETVPYIKWDNCNSTNITAVVRAQGLDVTPLSLPTSAQDSNFSVKTEMLGNEIDIE

Extended repression domain from residues 151 to 270:

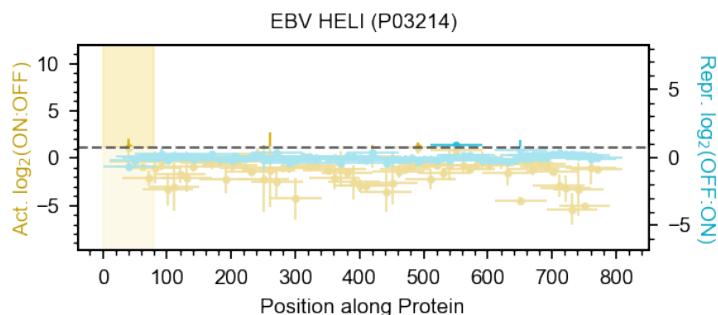
YLIPETVPYIKWDNCNSTNITAVVRAQGLDVTPLSLPTSAQDSNFSVKTEMLGNEIDIECIMEDGEISQVLPGDNKFNITCSGYESHVPSGGILTSTSPVATPIPGTGYA YSLRLTPRP

Max tile of repression domain from residues 181 to 260 (estimated 22.1% to 30.9% of cells repressed):

VTLPLSLPTSAQDSNFSVKTEMLGNEIDIECIMEDGEISQVLPGDNKFNITCSGYESHVPSGGILTSTSPVATPIPGTGY

EBV HELI (P03214)

Gene: BBLF4 ; Protein Family: HELI



Extended activation domain from residues 1 to 80:

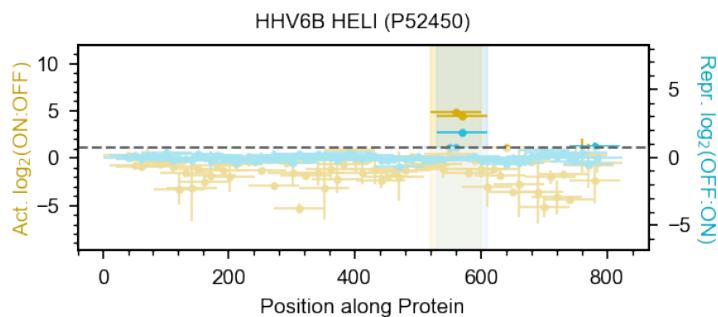
MAEEPRAPEALSSTFMLNMTSDASVRRIVRRIGTLARRRVQQLPDMETFSPEFDPELSEPPFLPFSAYVITGTAGAGKST

Max tile of activation domain from residues 1 to 80 (estimated 1.7% to 4.2% of cells activated):

MAEEPRAPEALSSTFMLNMTSDASVRRIVRRIGTLARRRVQQLPDMETFSPEFDPELSEPPFLPFSAYVITGTAGAGKST

HHV6B HELI (P52450)

Gene: U77 ; Protein Family: HELI



Extended activation domain from residues 521 to 610:

CSEFTTPEVLMEIKNIKMPMPSIEFLESEMSRMSRDVQTVETDERYDFGLVDDGLSDMDLLEIDPCGDPFFTRYSKLPLTNLSFEEISLLY

Max tile of activation domain from residues 521 to 600 (estimated 31.3% to 33.0% of cells activated):

CSEFTTPEVLMEIKNIKMPMPSIEFLESEMSRMSRDVQTVETDERYDFGLVDDGLSDMDLLEIDPCGDPFFTRYSKLPLTN

Extended repression domain from residues 511 to 610:

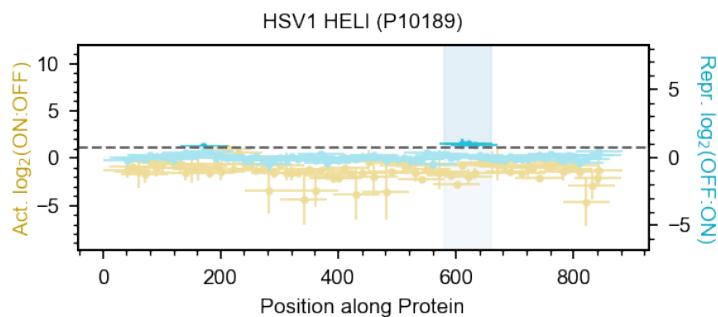
LMFGGMYSFCCEFTTPEVLMEIKNIKMPMPSIEFLESEMSRMSRDVQTVETDERYDFGLVDDGLSDMDLLEIDPCGDPFFTRYSKLPLTNLSFEEISLLY

Max tile of repression domain from residues 531 to 610 (estimated 37.3% to 40.3% of cells repressed):

MEIKNIKMPMPSIEFLESEMSRMSRDVQTVETDERYDFGLVDDGLSDMDLLEIDPCGDPFFTRYSKLPLTNLSFEEISLLY

HSV1 HELI (P10189)

Gene: UL5 ; Protein Family: HELI



Extended repression domain from residues 571 to 670:

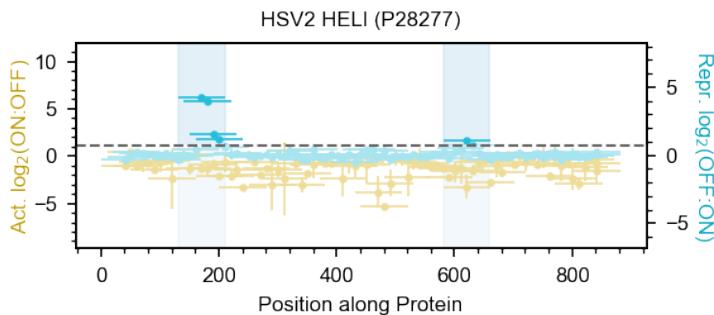
TLAYARMGELTAEILSLRPKSSGVPTQASVMADAGAPGERAFDFKQLGPRDGGPDDFPDDLDVIFAGLDEQQLDVFYCHYTPGEPETTAAVHTQFALL  
K

Max tile of repression domain from residues 581 to 660 (estimated 17.8% to 20.5% of cells repressed):

TAEILSLRPKSSGVPTQASVMADAGAPGERAFDFKQLGPRDGGPDDFPDDLDVIFAGLDEQQLDVFYCHYTPGEPETTA

## HSV2 HELI (P28277)

Gene: UL5 ; Protein Family: HELI

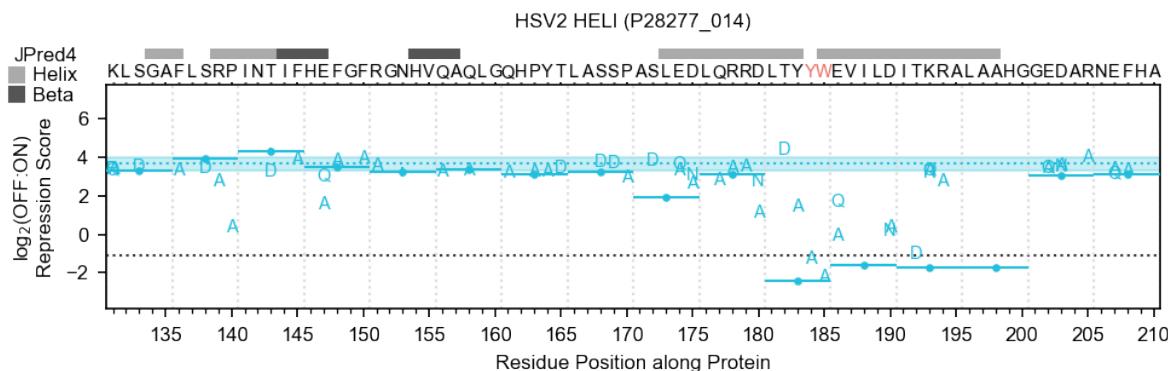


Extended repression domain from residues 131 to 240:

KLSGAFLSRPINTIFHEFGFRGNHVQAQLGQHPYTLASSPASLEDLQRRLTYYWEVILDITKRALAAHGGEDARNEFHALTAEQTLGLGQGALTRASV  
THGALPAFT

Max tile of repression domain from residues 131 to 210 (estimated 90.9% to 91.1% of cells repressed):

KLSGAFLSRPINTIFHEFGFRGNHVQAQLGQHPYTLASSPASLEDLQRRLTYYWEVILDITKRALAAHGGEDARNEFHA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
CtBP_expanded	170	174	PASLE	No	-	-	
flexi_NRBOX	184	190	YWEVILD	Yes	181	200	LTYYWEVILDITKRALAAHG
SUMO_SIM_par	186	192	EVILDIT	Yes	181	200	LTYYWEVILDITKRALAAHG

Extended repression domain from residues 581 to 670:

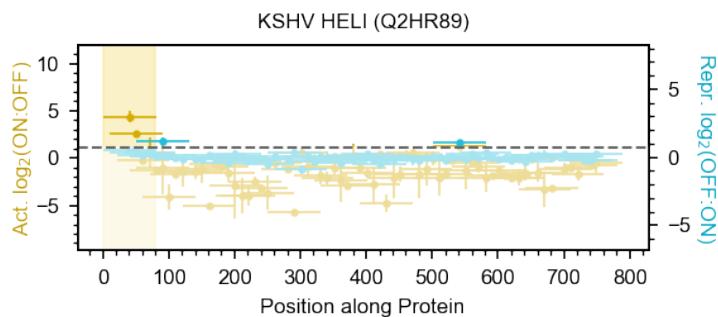
AELLSLRDAAGASATRAADTSRSPGERAFNFKHLGPRDGGPDDFPDDLDVIFAGLDEQQLDVFYCHYALEEPETTAAVHAQFGLLKR

Max tile of repression domain from residues 581 to 660 (estimated 20.5% to 20.6% of cells repressed):

AELLSLRDAAGASATRAADTSRSPGERAFNFKHLGPRDGGPDDFPDDLDVIFAGLDEQQLDVFYCHYALEEPETAA

KSHV HELI (Q2HR89)

Gene: ORF44 ; Protein Family: HELI



Extended activation domain from residues 1 to 90:

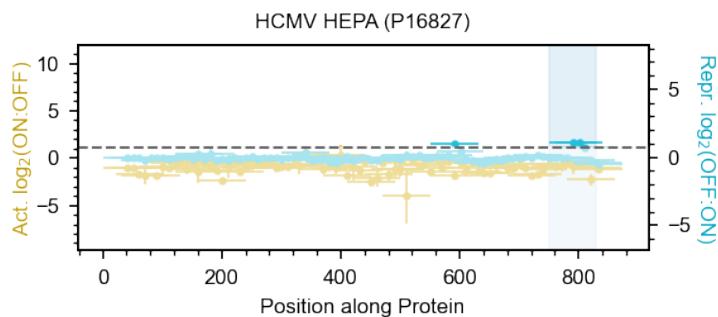
MDSSEGCTDMDEPSPGFILNMTSDAKVRSVVEQIDRLSNITTPPEMGWYDLEFDPLEDEGPFLPFSAYVITGTAGAGKSTSALHQNL

Max tile of activation domain from residues 1 to 80 (estimated 14.7% to 33.6% of cells activated):

MDSSEGCTDMDEPSPGFILNMTSDAKVRSVVEQIDRLSNITTPPEMGWYDLEFDPLEDEGPFLPFSAYVITGTAGAGKS

HCMV HEPA (P16827)

Gene: UL102 ; Protein Family: HEPA



Extended repression domain from residues 751 to 850:

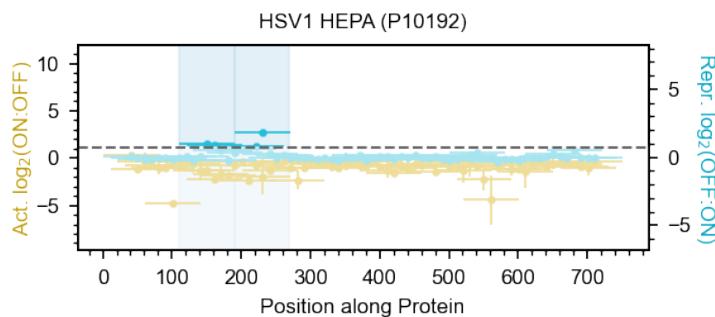
AEQGQIIVQSRDTALAADIGYGVYVDKAFAMLTACVEVWARELLSSSTATTACSSSVLSSALPSVTSSSGTATVSPPSCSSSATWLEERDEWVRSL

Max tile of repression domain from residues 751 to 830 (estimated 18.7% to 23.5% of cells repressed):

AEQGQIIVQSRDTALAADIGYGVYVDKAFAMLTACVEVWARELLSSSTATTACSSSVLSSALPSVTSSSGTATVSPP

HSV1 HEPA (P10192)

Gene: UL8 ; Protein Family: HEPA



Extended repression domain from residues 111 to 200:

RQTGPVALFAPLRLIGSDPRTGLVVKVERASWGPPAAPRAALLVAEANIDIDPMALAARVAEHPDARLAWARLAAIRDTPQCASAASLTVN

Max tile of repression domain from residues 111 to 190 (estimated 16.8% to 20.5% of cells repressed):

RQTGPVALFAPLRLIGSDPRTGLVVKVERASWGPPAAPRAALLVAEANIDIDPMALAARVAEHPDARLAWARLAAIRDTPQ

Extended repression domain from residues 181 to 270:

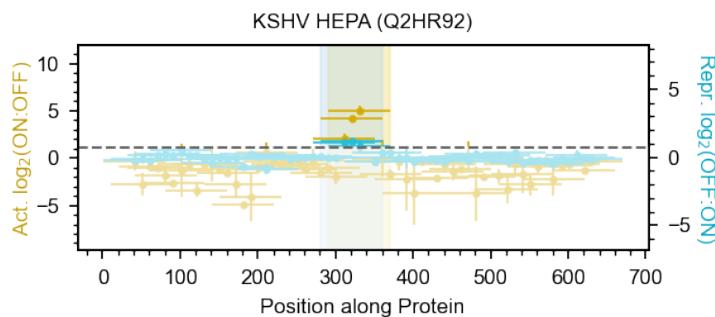
RLAAIRDTPQCASAASLTVNITTGTLFAREYQTLAFPPIKKEGAFGDLVEVCEVGLRPRGHQPQRVTARVLLPRDYDYFVSAGEKFSAPA

Max tile of repression domain from residues 191 to 270 (estimated 32.0% to 45.2% of cells repressed):

CASAASLTVNITTGTLFAREYQTLAFPPIKKEGAFGDLVEVCEVGLRPRGHQPQRVTARVLLPRDYDYFVSAGEKFSAPA

## KSHV HEPA (Q2HR92)

Gene: ORF40 ; Protein Family: HEPA



Extended repression domain from residues 271 to 370:

EEGTAFAPLLPAFPCIPLRYGSPTSLDRASVQWDLFEPHILTHFDGIKRTSLADTVFGYDSL AISRECEDQYVWPTPVDININLCTSDTMAIVREPSG

Max tile of repression domain from residues 281 to 360 (estimated 20.0% to 27.5% of cells repressed):

PAFPCIPLRYGSPTSLDRASVQWDLFEPHILTHFDGIKRTSLADTVFGYDSL AISRECEDQYVWPTPVDININLCTSD

Extended activation domain from residues 271 to 370:

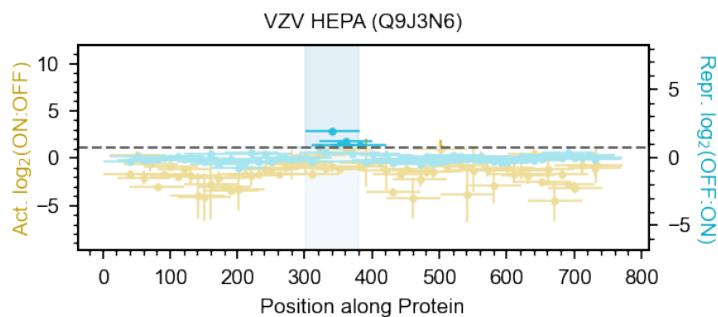
EEGTAFAPLLPAFPCIPLRYGSPTSLDRASVQWDLFEPHILTHFDGIKRTSLADTVFGYDSL AISRECEDQYVWPTPVDININLCTSDTMAIVREPSG

Max tile of activation domain from residues 291 to 370 (estimated 26.8% to 45.0% of cells activated):

GSPTSLDRASVQWDLFEPHILTHFDGIKRTSLADTVFGYDSL AISRECEDQYVWPTPVDININLCTSDTMAIVREPSG

VZV HEPA (Q9J3N6)

Gene: ORF52 ; Protein Family: HEPA



Extended repression domain from residues 301 to 400:

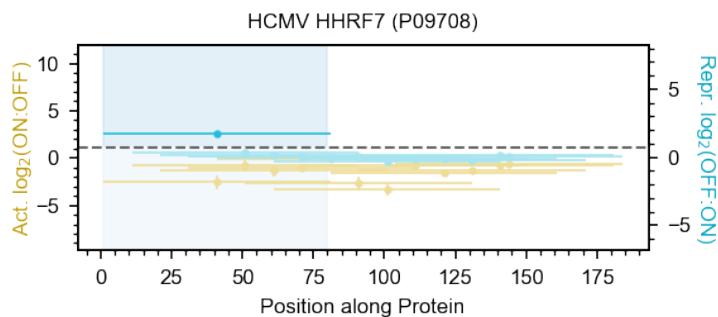
FAYLGPELNPKGEDRDYFCTVGFPGWTLRTQTPAVESIRTATEMYMETDGLWPVTGIQAFHYLAPWGQHPPRQDLIGQIPQDTGHADATVNWD  
AG

Max tile of repression domain from residues 301 to 380 (estimated 39.5% to 41.3% of cells repressed):

FAYLGPELNPKGEDRDYFCTVGFPGWTLRTQTPAVESIRTATEMYMETDGLWPVTGIQAFHYLAPWGQHPPRQDL

HCMV HHRF7 (P09708)

Gene: US32 ; Protein Family: HHRF7



Extended repression domain from residues 1 to 80:

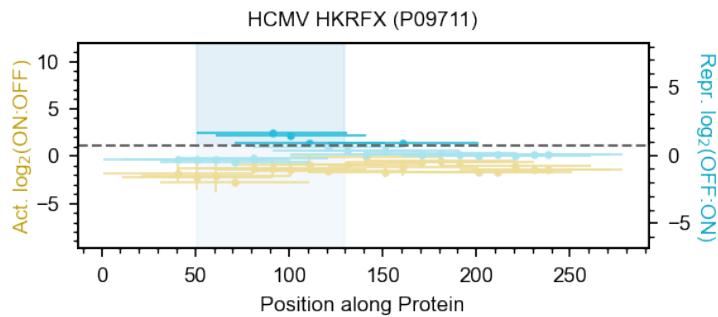
MAMYTSESERDWRRVIHDHGLWCDCGDWREHLYCVYDSHFQRRPTTRAERRAANWRRQMRLHRLWCFCQDWKCHALYA

Max tile of repression domain from residues 1 to 80 (estimated 33.7% to 40.0% of cells repressed):

MAMYTSESERDWRRVIHDHGLWCDCGDWREHLYCVYDSHFQRRPTTRAERRAANWRRQMRLHRLWCFCQDWKCHALYA

HCMV HKRFX (P09711)

Gene: J1I ; Protein Family: HKRFX



Extended repression domain from residues 51 to 150:

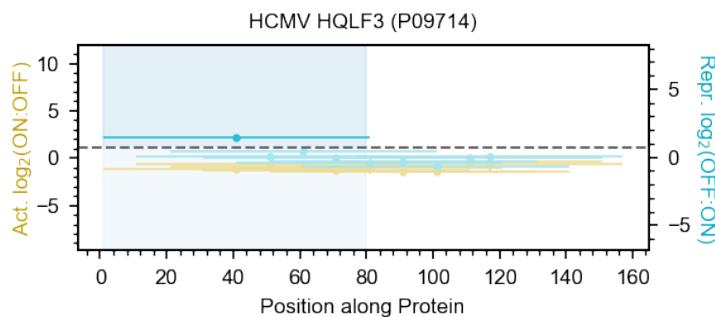
DTGKDRGTHRQRAETPSRSPVPTTNTVGRHAPAVRRQRRTQHAYGPQHSLEDPPRGPAPAVFWVCRGAAGWVCAGCVAGVCWVCRCVGRVCQG  
VSRACA

Max tile of repression domain from residues 51 to 130 (estimated 31.2% to 39.2% of cells repressed):

DTGKDRGTHRQRAETPSRSPVPTTNTVGRHAPAVRRQRRTQHAYGPQHSLEDPPRGPAPAVFWVCRGAAGWVCAGCVAGV

HCMV HQLF3 (P09714)

Gene: US1 ; Protein Family: HQLF3



Extended repression domain from residues 1 to 80:

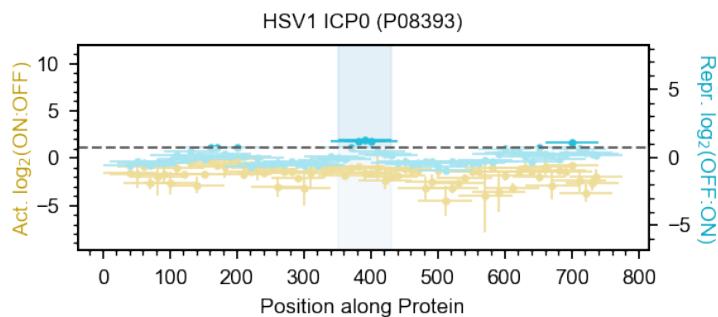
MASGLGDLSVGSSLPMRELAWRRVADDSDLWCCCCMDWKAHVEYAHPSAELRPGSGGWPEHAEAQWRQQVHAAHDVWCN

Max tile of repression domain from residues 1 to 80 (estimated 29.1% to 29.6% of cells repressed):

MASGLGDLSVGSSLPMRELAWRRVADDSDLWCCCCMDWKAHVEYAHPSAELRPGSGGWPEHAEAQWRQQVHAAHDVWCN

HSV1 ICP0 (P08393)

Gene: RL2 ; Protein Family: ICP0



Extended repression domain from residues 331 to 440:

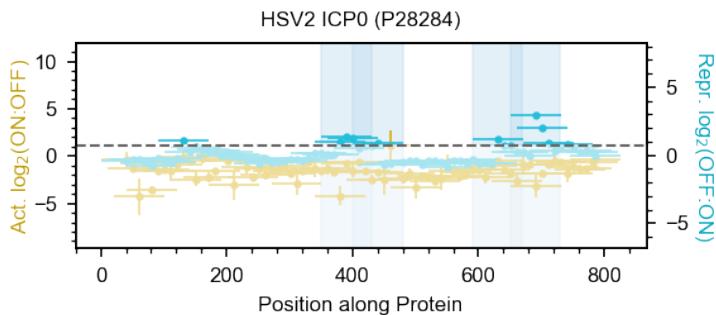
VGVVEAEAGRPRGRTGPLVNRPAPLANNRDPIVISDSPPASPHRPPAAPMPGSAPRPGPPASAASGPAPRRAAVAPCVRAPPPGPGRAPAPGAEPARPADARRVPQS

Max tile of repression domain from residues 351 to 430 (estimated 23.6% to 26.0% of cells repressed):

RPAPLANNRDPIVISDSPPASPHRPPAAPMPGSAPRPGPPASAASGPAPRRAAVAPCVRAPPPGPGRAPAPGAEPAR

## HSV2 ICP0 (P28284)

Gene: RL2 ; Protein Family: ICP0



Extended repression domain from residues 341 to 440:

DAAAAEGRTPPPARQPRRAQEPPIVISDSSPPSPRRPAGPGPLSFVSSSSAQVSSGPGGGGLPQSSGRAARPRAAVAPRVRSPRRAAAAPVVSASADAA  
GP

Max tile of repression domain from residues 351 to 430 (estimated 27.6% to 28.5% of cells repressed):

PARQPRAAQEPPIVISDSSPPSPRRPAGPGPLSFVSSSSAQVSSGPGGGGLPQSSGRAARPRAAVAPRVRSPRRAAAAPV

Extended repression domain from residues 381 to 480:

PLSFVSSSSAQVSSGPGGGGLPQSSGRAARPRAAVAPRVRSPRRAAAAPVVSASADAAGPAPPAPVDAHRAPRSRMTQAQTDTQAQSLGRAGATD  
ARGS

Max tile of repression domain from residues 401 to 480 (estimated 16.5% to 18.3% of cells repressed):

LPQSSGRAARPRAAVAPRVRSPRRAAAAPVVSASADAAGPAPPAPVDAHRAPRSRMTQAQTDTQAQSLGRAGATDARGS

Extended repression domain from residues 591 to 690:

SSSASSSSASSSSASSSSASSSSASSSSASSSSASSSSASSSGAGGSVASASGAGERRETSLGPRAAAPRGPRKCARKTRHAEGGPEPGARDPAPGLTRY  
LPI

Max tile of repression domain from residues 591 to 670 (estimated 21.2% to 25.8% of cells repressed):

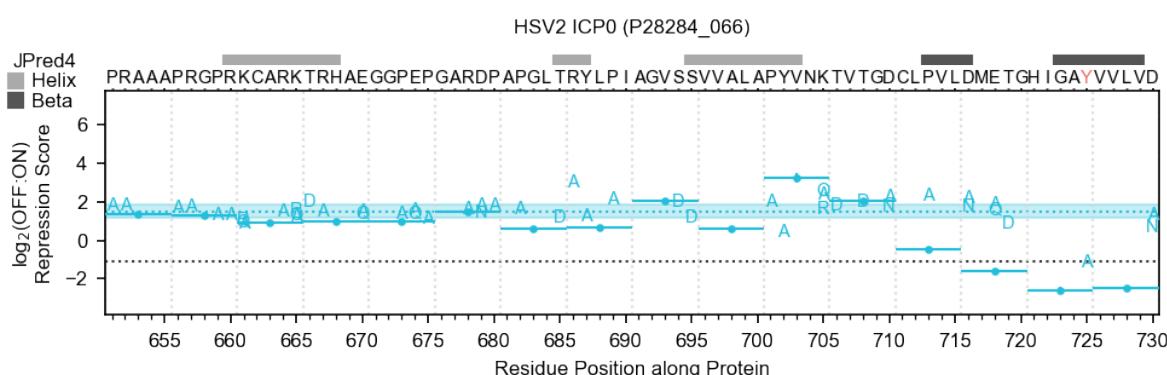
SSSASSSSASSSSASSSSASSSSASSSSASSSGAGGSVASASGAGERRETSLGPRAAAPRGPRKCARKTRHAE

Extended repression domain from residues 651 to 750:

PRAAAPRGPRKCARKTRHAEGGPEPGARDPAPGLTRYLPIAGVSSVALAPYVNKTVDCLPVLDMETGHIGAYVVLVDQTGNVADLLRAAAPAWSR  
RT

Max tile of repression domain from residues 651 to 730 (estimated 68.8% to 70.6% of cells repressed):

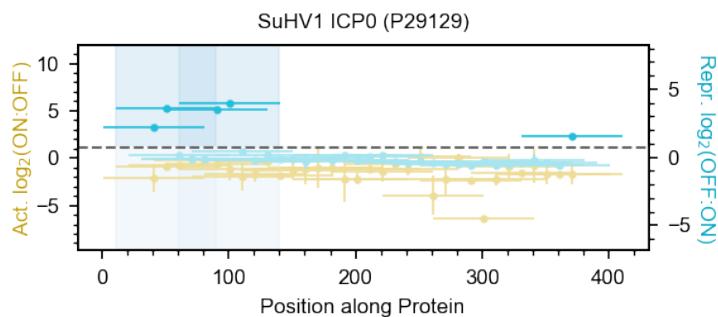
PRAAAPRGPRKCARKTRHAEGGPEPGARDPAPGLTRYLPIAGVSSVALAPYVNKTVDCLPVLDMETGHIGAYVVLVD



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	692	698	GVSSVVA	No	-	-	
flexi_NRBOX	721	727	HIGAYVV	Yes	716	730	DMETGHIGAYVVLVD
SUMO_SIM_par	725	730	YVVLVD	Yes	716	730	DMETGHIGAYVVLVD

## SuHV1 ICP0 (P29129)

Gene: EP0 ; Protein Family: ICP0



Extended repression domain from residues 1 to 90:

MGCTVSRRRTTAEASSAWGIFGFYRPRSPSPPPQRLSLPLTVMDCPICLDVAATEAQTLPCMHKFCLDCIQRWTLTACPLCNARVTS

Max tile of repression domain from residues 11 to 90 (estimated 81.2% to 83.6% of cells repressed):

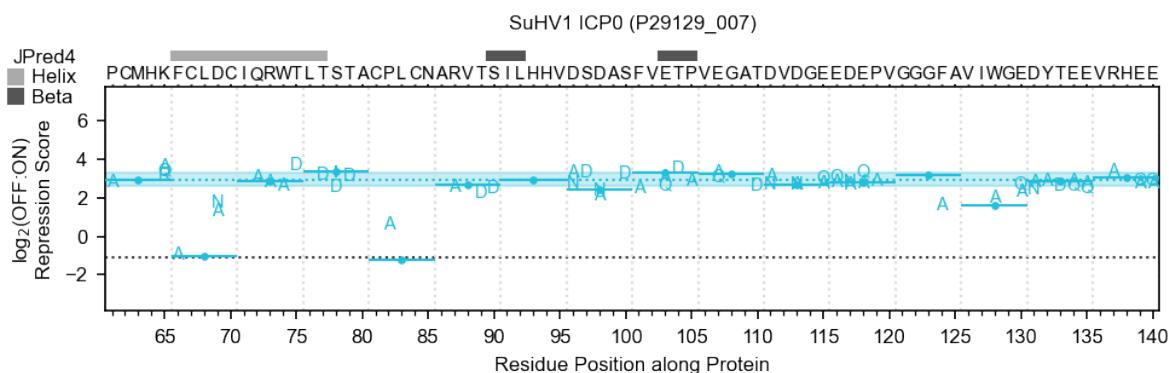
TTAEASSAWGIFGFYRPRSPSPPPQRLSLPLTVMDCPICLDVAATEAQTLPCMHKFCLDCIQRWTLTACPLCNARVTS

Extended repression domain from residues 51 to 140:

DVAATEAQTLPCMHKFCLDCIQRWTLTACPLCNARVTSILHHVDSDASFVETPVEGATDVGEEDEPVGGGFAVIWGDEDYTEEVHRHEE

Max tile of repression domain from residues 61 to 140 (estimated 87.6% to 87.6% of cells repressed):

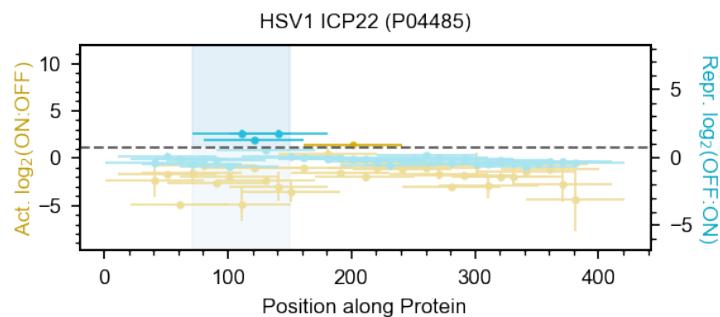
PCMHKFCLDCIQRWTLTACPLCNARVTSILHHVDSDASFVETPVEGATDVGEEDEPVGGGFAVIWGDEDYTEEVHRHEE



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	81	85	CPLCN
flexi_NRBOX	87	93	RVTSILH	No	-	-	

HSV1 ICP22 (P04485)

Gene: US1 ; Protein Family: ICP22



Extended repression domain from residues 71 to 160:

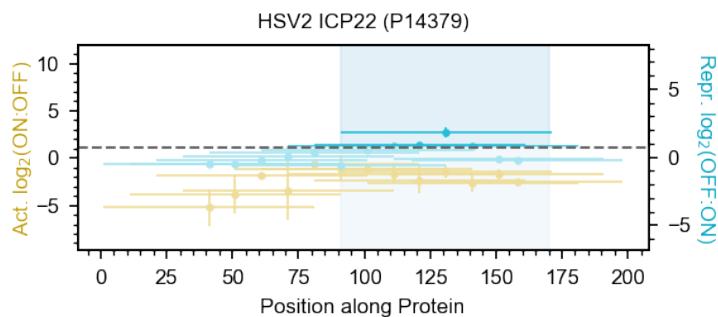
PRIGGRRAPRRLGGGRFFLDMSAESTTGTETDASVSDPDDTSDWSYDDIPPRPKRARVNRLTSSPDRRDGVIFPKMGRVRSTRETQPR

Max tile of repression domain from residues 71 to 150 (estimated 31.0% to 43.6% of cells repressed):

PRIGGRRAPRRLGGGRFFLDMSAESTTGTETDASVSDPDDTSDWSYDDIPPRPKRARVNRLTSSPDRRDGVIFPKMGRV

HSV2 ICP22 (P14379)

Gene: US1 ; Protein Family: ICP22



Extended repression domain from residues 71 to 180:

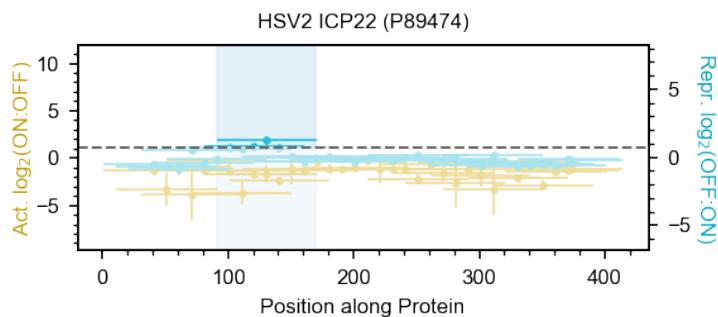
PPRELGGRYFLDLSAESTTGTESEGTPGPSDDDDASDGWLVDTPPRKSKRPRINLRLTSSPDERRAGVVFPEVWRSDRPIRAAQQPQAPAQSSGDRAH  
APRRSARQAQMRS

Max tile of repression domain from residues 91 to 170 (estimated 28.6% to 50.0% of cells repressed):

TESEGTPGPSDDDDASDGWLVDTPPRKSKRPRINLRLTSSPDERRAGVVFPEVWRSDRPIRAAQQPQAPAQSSGDRAHAPR

HSV2 ICP22 (P89474)

Gene: US1 ; Protein Family: ICP22



Extended repression domain from residues 81 to 180:

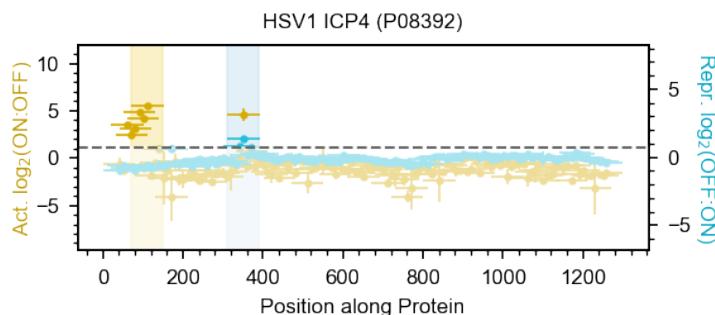
LDLSAESTTGTSEGTGPSDDDDDDASDGWLVDTPPRKSKRPRINLRLTSSPDRRAGVVFPEVWRSDRPIRAAQPQAPASLPGIAHRRSARQAQMR  
SG

Max tile of repression domain from residues 91 to 170 (estimated 18.2% to 32.0% of cells repressed):

TESEGTTGPSDDDDDDASDGWLVDTPPRKSKRPRINLRLTSSPDRRAGVVFPEVWRSDRPIRAAQPQAPASLPGIAHRR

## HSV1 ICP4 (P08392)

Gene: RS1 ; Protein Family: ICP4

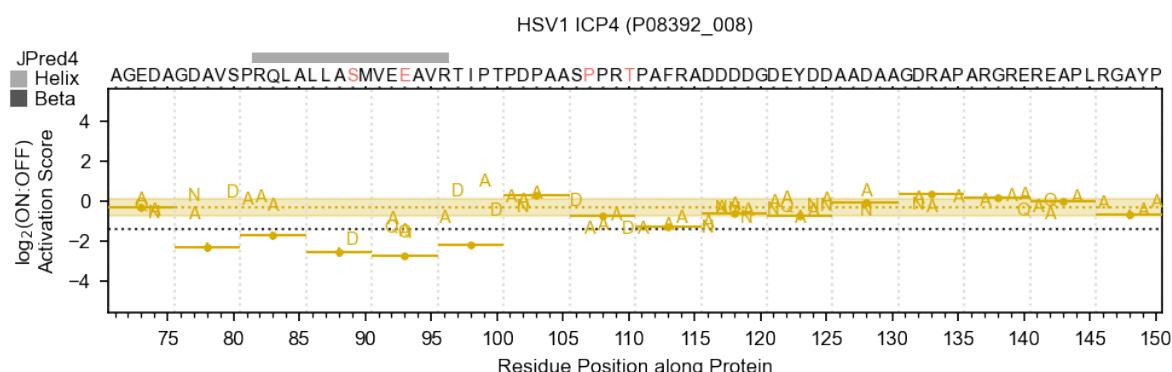


Extended activation domain from residues 21 to 150:

TPSPDRDERGALGWGAETEEGGDDPDHDPDHPHDLDARRDGRAPAAGTDAGEDAGDAVSPRQLALLASMVEEAVRTIPTPDPAASPPRTPAFRADD  
DDGDEYDDAADAAGDRAPARGREREAPLRGAYP

Max tile of activation domain from residues 71 to 150 (estimated 39.1% to 49.6% of cells activated):

AGEDAGDAVSPRQLALLASMVEEAVRTIPTPDPAASPPRTPAFRADDGGDEYDDAADAAGDRAPARGREREAPLRGAYP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	76	100	GDAVSPRQLALLASMVEEAVRTIPT
WW_3	106	110	SPPRT	No	-	-	

Extended repression domain from residues 301 to 390:

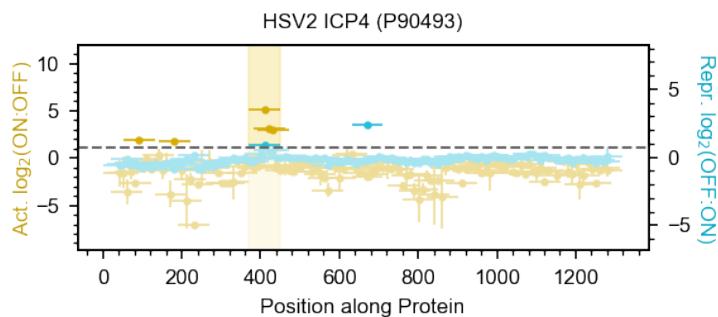
AFYARYRDGYVSGEPWPGAGPPPPGRVLYGGLGDSRPGLWGAPEAEERRFEASGAPAAVWAPELGDAQQYALITRLLYTPDAEAMGW

Max tile of repression domain from residues 311 to 390 (estimated 25.0% to 27.9% of cells repressed):

VSGEPWPGAGPPPPGRVLYGGLGDSRPGLWGAPEAEERRFEASGAPAAVWAPELGDAQQYALITRLLYTPDAEAMGW

HSV2 ICP4 (P90493)

Gene: RS1 ; Protein Family: ICP4



Extended activation domain from residues 371 to 470:

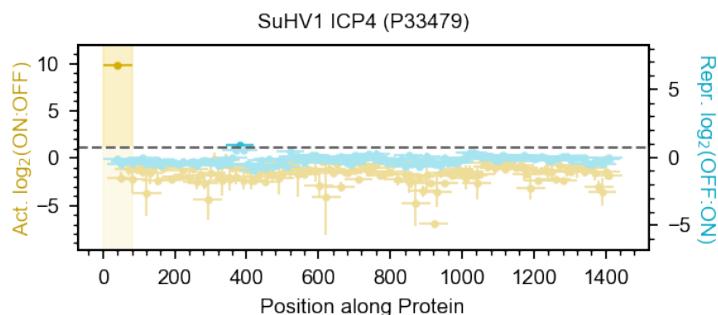
EPWPGAGPPPPGRVLYGGLGDSRPLWGAPEEEARARFEASGAPAPVWAPELGDAQQYALITRLLYTPDAEAMGWLQNPRVAPGDVALDQACFRI  
SGA

Max tile of activation domain from residues 371 to 450 (estimated 33.3% to 39.7% of cells activated):

EPWPGAGPPPPGRVLYGGLGDSRPLWGAPEEEARARFEASGAPAPVWAPELGDAQQYALITRLLYTPDAEAMGWLQN

## SuHV1 ICP4 (P33479)

Gene: - ; Protein Family: ICP4

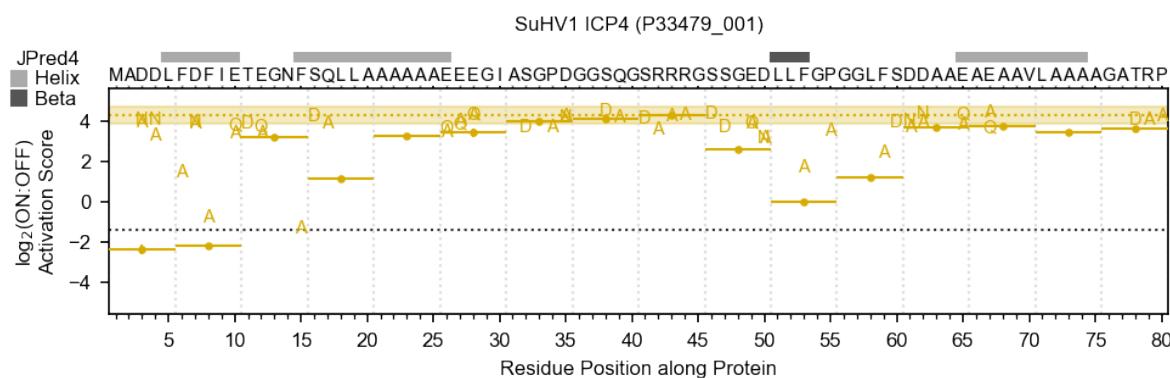


Extended activation domain from residues 1 to 80:

MADDLFDFIETEGNFSQLLAAAAAAEEEGIASGPDGGSQGSRRGSSGEDLLFGPGGLFSDDAAEAAVLAAGATRP

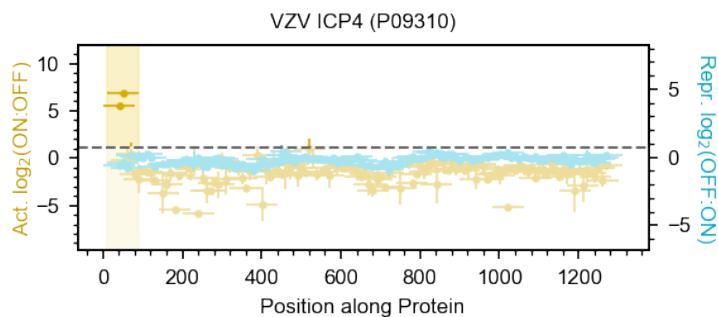
Max tile of activation domain from residues 1 to 80 (estimated 95.5% to 96.1% of cells activated):

MADDLFDFIETEGNFSQLLAAAAAAEEEGIASGPDGGSQGSRRGSSGEDLLFGPGGLFSDDAAEAAVLAAGATRP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	4	10	DLFDFIE	Yes	1	10	MADDLFDFIE
flexi_NRBOX	14	20	NFSQLLA	No	-	-	

VZV ICP4 (P09310)  
Gene: ORF62/ORF71 ; Protein Family: ICP4

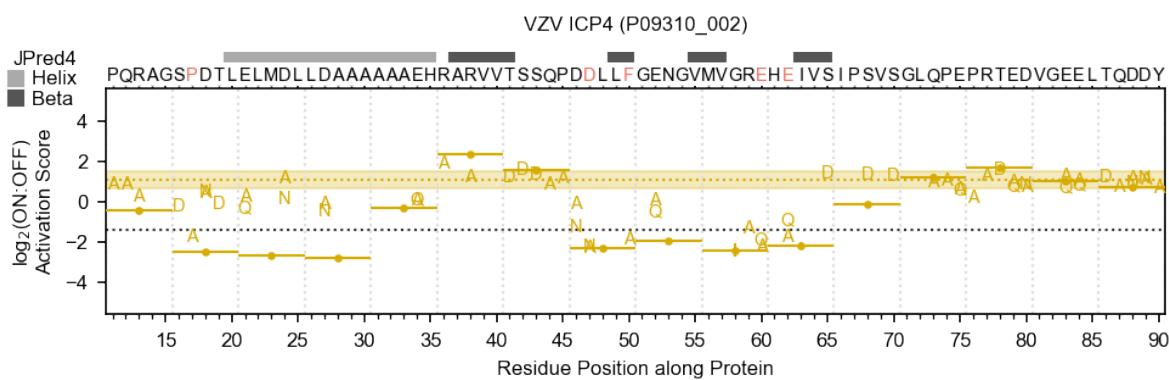


Extended activation domain from residues 1 to 90:

MDTPPMQRSTPQRAGSPDTLEMDLLDAAAAAAEHRARVVTSQPDDLLFGENGVMVGREHEIVSIPSVSGLQPEPRTEDVGEELTQDDY

Max tile of activation domain from residues 11 to 90 (estimated 71.5% to 74.3% of cells activated):

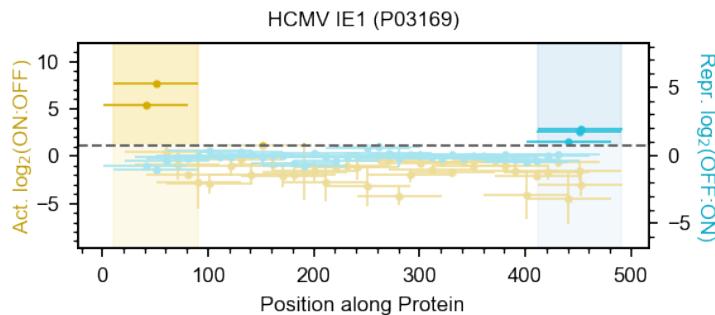
PQRAGSPDTLEMDLLDAAAAAAEHRARVVTSQPDDLLFGENGVMVGREHEIVSIPSVSGLQPEPRTEDVGEELTQDDY



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	18	24	DTLELM	Yes	16	30	SPDTLEMDLLDAAA
SUMO_SIM_par	18	24	DTLELM	Yes	16	30	SPDTLEMDLLDAAA
LIG_NRBOX	21	27	ELMDLL	Yes	16	30	SPDTLEMDLLDAAA
CtBP_expanded	45	49	PDDLL	Yes	46	65	DDLLFGENGVMVGREHEIVS
SUMO_SIM_par	62	68	EIVSIPS	Yes	46	65	DDLLFGENGVMVGREHEIVS

## HCMV IE1 (P03169)

Gene: UL123 ; Protein Family: IE

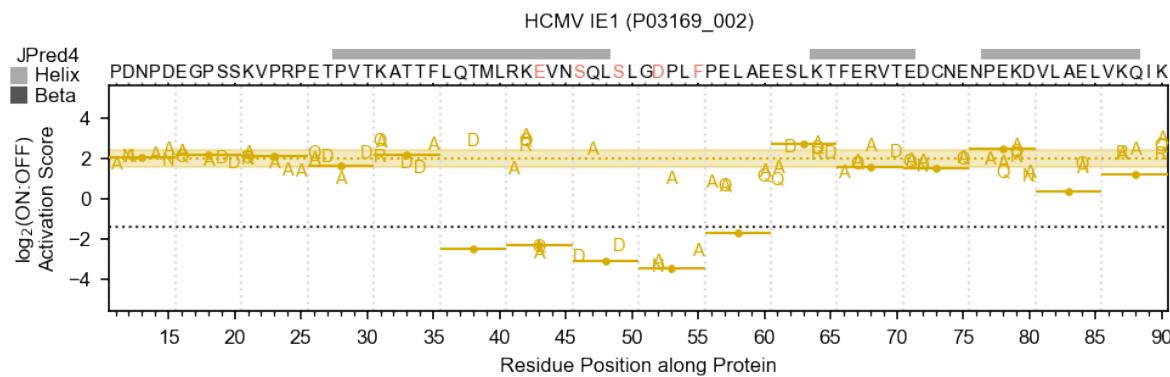


Extended activation domain from residues 1 to 90:

MESSAKRKMDPDNPDEGPSSKVPVRPETPVTKATTFLQTLRKEVNSQLSQLGDPLFPELAESLKTFERVTEDCNENPEKDVLALVKQIK

Max tile of activation domain from residues 11 to 90 (estimated 83.3% to 84.5% of cells activated):

PDNPDEGPSSKVPVRPETPVTKATTFLQTLRKEVNSQLSQLGDPLFPELAESLKTFERVTEDCNENPEKDVLALVKQIK



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	36	60	LQTLRLKEVNSQLSQLGDPLFP ELAE
flexi_NRBOX	81	87	VLAELVK	No	-	-	

Extended repression domain from residues 401 to 491:

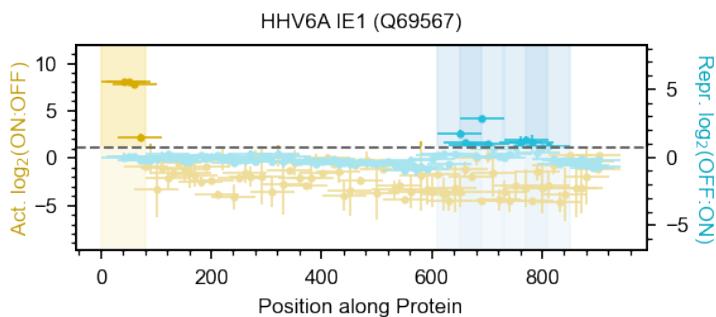
VSPPESPVPATIPLSSVIVAENSDQEESEQSDEEEEEGAQEEREDTVSVKSEPVSEIEEVAPEEEEDGAEEPTASGGKSTHPMVTRSKADQ

Max tile of repression domain from residues 412 to 491 (estimated 35.6% to 45.3% of cells repressed):

IPLSSVIVAENSDQEESEQSDEEEEEGAQEEREDTVSVKSEPVSEIEEVAPEEEEDGAEEPTASGGKSTHPMVTRSKADQ

## HHV6A IE1 (Q69567)

Gene: U90/U89 ; Protein Family: IE

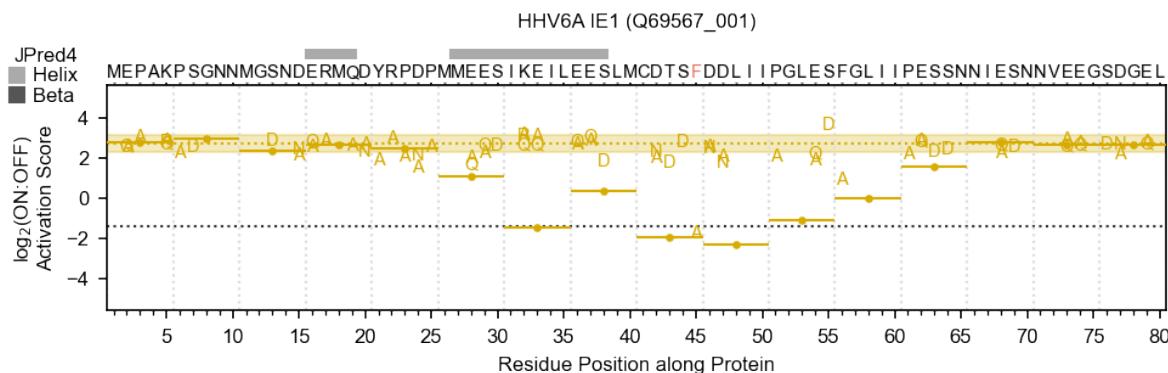


Extended activation domain from residues 1 to 110:

MEPAKPSGNMGSNDERMQDYRPDPMMEESIKEILEESLMCDTSFDDLIIPGLESFGLIIPESSNNIESNNVEEGSDGELKTLAAQSAGNCIQSIGASVKA  
AMIKQESEQSM

Max tile of activation domain from residues 1 to 80 (estimated 87.1% to 88.9% of cells activated):

MEPAKPSGNMGSNDERMQDYRPDPMMEESIKEILEESLMCDTSFDDLIIPGLESFGLIIPESSNNIESNNVEEGSDGEL



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	30	36	SIKEILE	Yes	31	35	IKEIL
flexi_NRBOX	44	50	SFDDLII	Yes	41	50	CDTSFDDLII

Extended repression domain from residues 611 to 710:

VAKRKHVSSKSPKNKKIKTDQLPKAADVIVISSEDEEDGDNIIIGNSILIKAIKSESDSESSSESNDCTSEHKQLHLSDYDEVTNNNGHCPSYGFPTPVF

Max tile of repression domain from residues 611 to 690 (estimated 30.2% to 43.8% of cells repressed):

VAKRKHVSSKSPKNKKIKTDQLPKAADVIVISSEDEEDGDNIIIGNSILIKAIKSESDSESSSESNDCTSEHKQLHLS

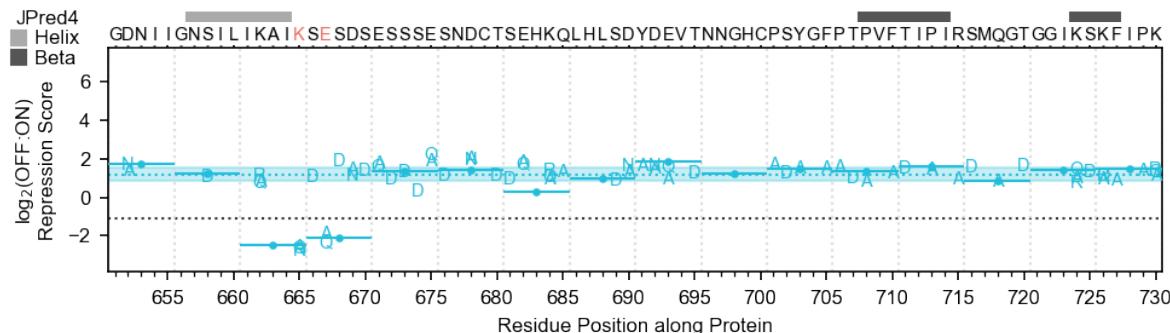
Extended repression domain from residues 651 to 740:

GDNIIGNSILIKAIKSESDSESSSESNDCTSEHKQLHLSDYDEVTNNNGHCPSYGFPTPVFTIPIRSMQGTGGIKSKFIPKKNWIWYMKKT

Max tile of repression domain from residues 651 to 730 (estimated 61.7% to 69.0% of cells repressed):

GDNIIGNSILIKAIKSESDSESSSESNDCTSEHKQLHLSDYDEVTNNNGHCPSYGFPTPVFTIPIRSMQGTGGIKSKFIPK

## HHV6A IE1 (Q69567\_066)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	664	667	IKSE	Yes	661	670	IKA IKSE SDS
SUMO_rev	676	686	SNDCTSEHKQL	No	-	-	

Extended repression domain from residues 711 to 820:

TIPIRSMQGTGGIJKSKFIPKKNIWYMKKTHQVDNCPIHNSENVDAKDDSDGTEAKHCFMNHFVPIKTDDDEDYDKNNVSYIYNKIQNSKIDSGDIPTKKLIDMVMDNFMDLNDIIKQGITKHCQDLCNKYNVVTPPTC  
DMVMDFN

Max tile of repression domain from residues 731 to 810 (estimated 20.3% to 32.4% of cells repressed):

KNWIWYMKKTHQVDNCPIHNSENVDAKDDSDGTEAKHCFMNHFVPIKTDDDEDYDKNNVSYIYNKIQNSKIDSGDIPTKK

Extended repression domain from residues 761 to 850:

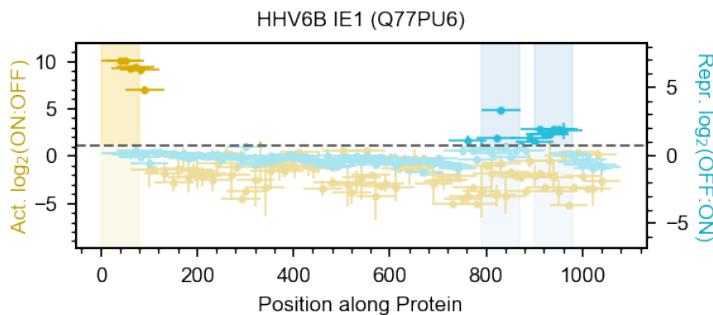
DGTEAKHCFMNHFVPIKTDDDEDYDKNNVSYIYNKIQNSKIDSGDIPTKKLIDMVMDNFMDLNDIIKQGITKHCQDLCNKYNVVTPPTC

Max tile of repression domain from residues 771 to 850 (estimated 10.3% to 21.4% of cells repressed):

NHFVPIKTDDDEDYDKNNVSYIYNKIQNSKIDSGDIPTKKLIDMVMDNFMDLNDIIKQGITKHCQDLCNKYNVVTPPTC

## HHV6B IE1 (Q77PU6)

Gene: U90 ; Protein Family: IE

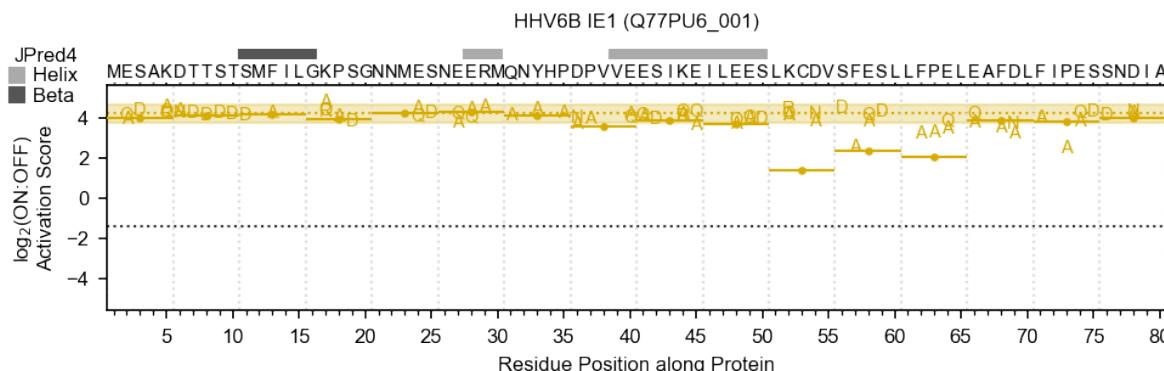


Extended activation domain from residues 1 to 130:

```
MESAKDTTSTSMFILGKPGNNMESNEERMQNYHPDPVVEESIKEILEESLKCDSFESLLFPELEAFDLFIPPESSNDIASKNVSYSSNVEEGASDEFKTL  
VAQSVGNCIQSIGASVKAAMKQEWSNMD
```

Max tile of activation domain from residues 1 to 80 (estimated 96.0% to 96.6% of cells activated):

```
MESAKDTTSTSMFILGKPGNNMESNEERMQNYHPDPVVEESIKEILEESLKCDSFESLLFPELEAFDLFIPPESSNDIA
```



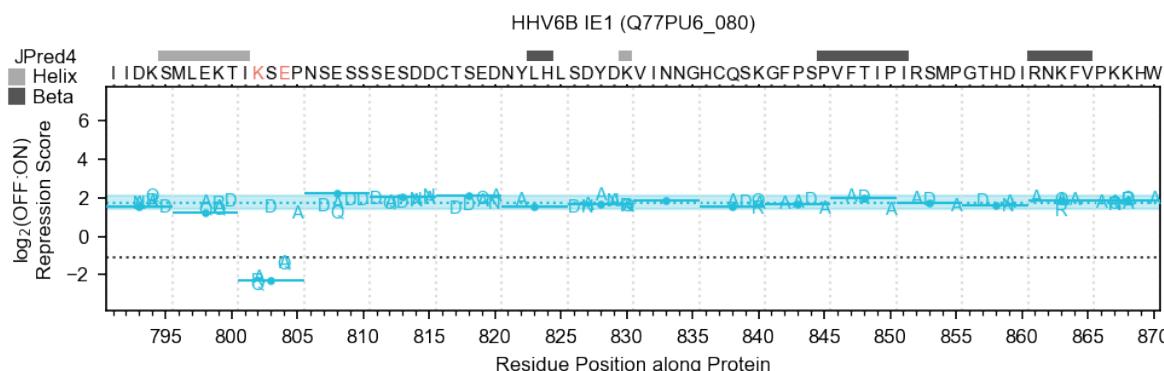
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	42	48	SIKEILE	No	-	-	
flexi_NRBOX	56	62	SFESLLF	No	-	-	

Extended repression domain from residues 781 to 870:

```
ESEDEEDGNNIIDKSMLEKTIKSEPNSESSSESDDCTSEDNYLHLSDYDKVINNGHCQSKGFPSPVFTIPIRSMPGTHDIRNKFVPKKHW
```

Max tile of repression domain from residues 791 to 870 (estimated 72.5% to 81.0% of cells repressed):

```
IIDKSMLEKTIKSEPNSESSSESDDCTSEDNYLHLSDYDKVINNGHCQSKGFPSPVFTIPIRSMPGTHDIRNKFVPKKHW
```



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	801	804	IKSE	Yes	801	805	IKSEP

Extended repression domain from residues 851 to 1000:

```
IRSMPGTHDIRNKFVPKKHWLWFMRKTHKDNCVIHSSAKMNVKNDSDVTEANHCFINHFVPIKTDEEYEKENVSYTYSKIQDSKTDLEDITPTKKLITE
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MVMENFMDLTDIHKHIAKHCQDLSSKYTVITHTACEKNLNVANSQNLV

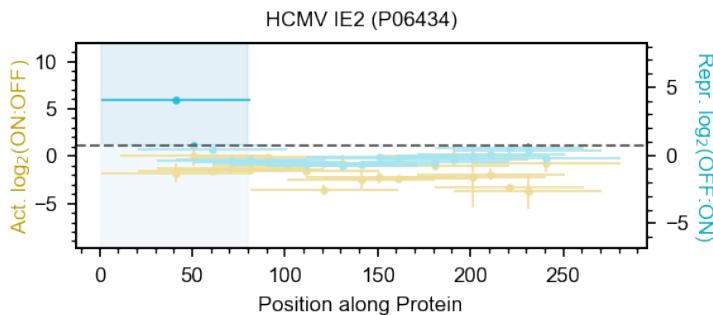
Max tile of repression domain from residues 901 to 980 (estimated 38.7% to 44.5% of cells repressed):

EANHCFINHFVPIKTDEEYEKEVSYTYSKIQDSKTDLEDITPTKKLITEMVMENFMDLTDIHKHIAKHCQDLSSKYT

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## HCMV IE2 (P06434)

Gene: UL122 ; Protein Family: IE

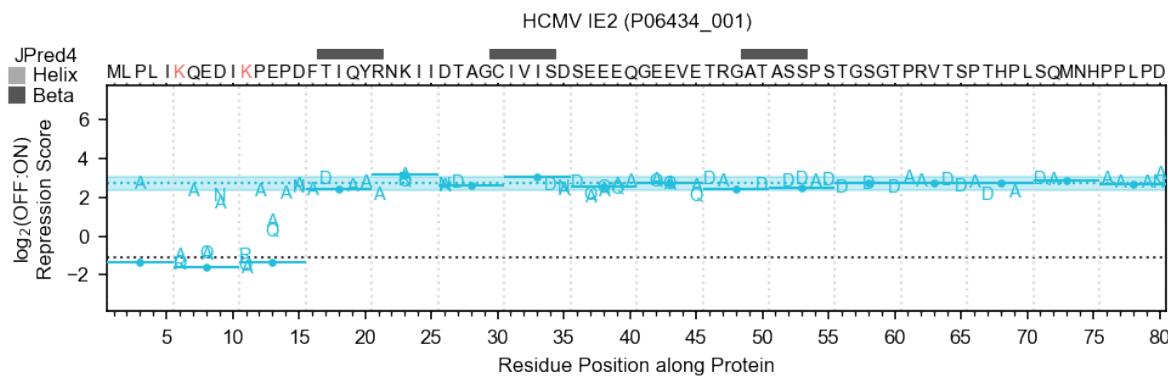


Extended repression domain from residues 1 to 80:

MLPLIKQEDIKPEPDFTIQYRNKIIDTAGCIVISDSEEQGEEVETRGATASSPSTGSGTPRVTSPTHPLSQMNHPPLPD

Max tile of repression domain from residues 1 to 80 (estimated 88.2% to 89.4% of cells repressed):

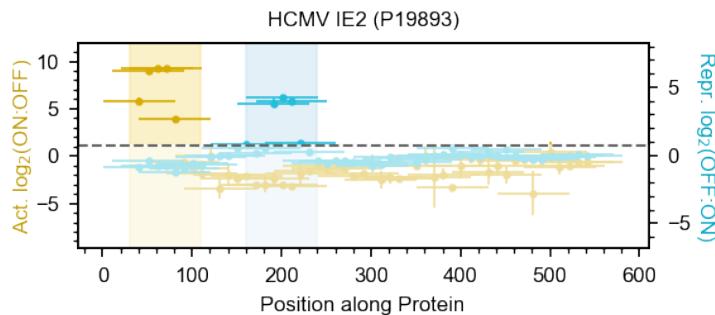
MLPLIKQEDIKPEPDFTIQYRNKIIDTAGCIVISDSEEQGEEVETRGATASSPSTGSGTPRVTSPTHPLSQMNHPPLPD



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	10	13	IKPE	Yes	1	15	MLPLIKQEDIKPEPD
SUMO_rev	8	12	EDIKP	Yes	1	15	MLPLIKQEDIKPEPD
SUMO_for	5	8	IKQE	Yes	1	15	MLPLIKQEDIKPEPD
WW_2	76	79	PPLP	No	-	-	

## HCMV IE2 (P19893)

Gene: UL122 ; Protein Family: IE

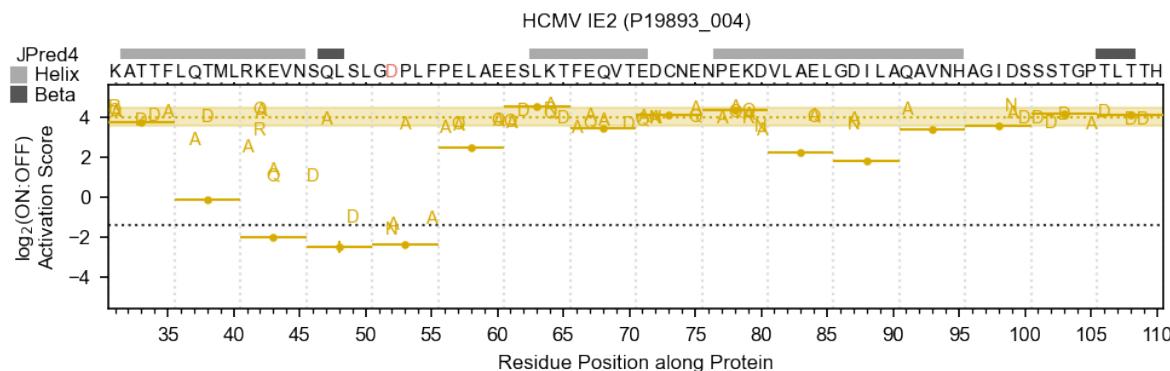


Extended activation domain from residues 1 to 120:

MESSAKRKMDPDNPDEGPSSKVRPRPETPVTKATTFLQTLRKEVNSQLSQLGDPLFPELAESLKTFEQVTEDCNENPEKDVLAEGLDILAQAVNHAGIDSSSTGPTLTTHSCSVSSAPLN

Max tile of activation domain from residues 31 to 110 (estimated 94.3% to 94.6% of cells activated):

KATTFLQTLRKEVNSQLSQLGDPLFPELAESLKTFEQVTEDCNENPEKDVLAEGLDILAQAVNHAGIDSSSTGPTLTTH



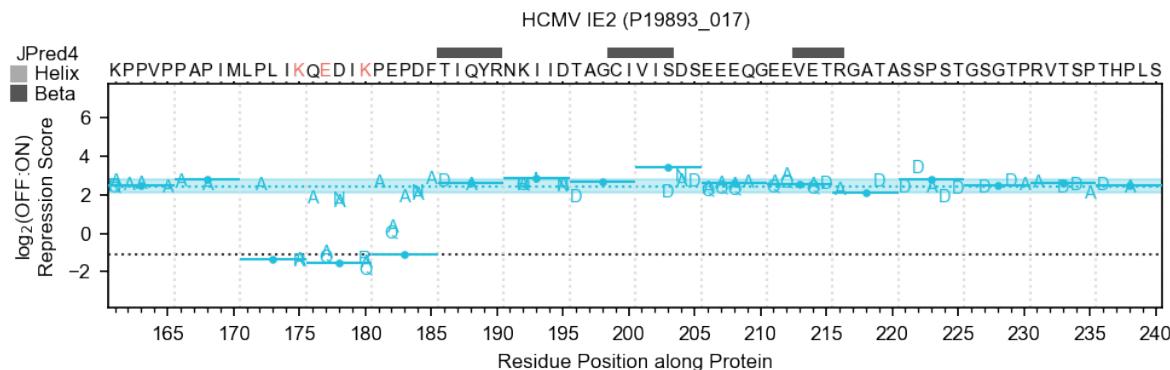
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	84	90	ELGDILA	No	41	55	RKEVNSQLSQLGDPLF

Extended repression domain from residues 151 to 260:

KTRPRFKVIIKPPVPPAPIMPLPLIKQEDIKPEPDFTIQYRNKIIDTAGCIVISDSEEEQGEEVETRGATASSPSTGSGTPRVTSPTHPLSQMNHPPLPDPLGRP DEDSSS

Max tile of repression domain from residues 161 to 240 (estimated 88.6% to 92.7% of cells repressed):

KPPVPPAPIMPLPLIKQEDIKPEPDFTIQYRNKIIDTAGCIVISDSEEEQGEEVETRGATASSPSTGSGTPRVTSPTHPLS



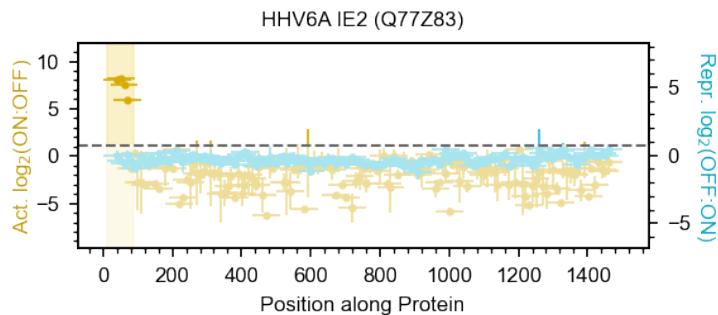
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	179	182	IKPE	Yes	171	185	LPLIKQEDIKPEPDF
SUMO_for	174	177	IKQE	Yes	171	185	LPLIKQEDIKPEPDF
SUMO_rev	177	181	EDIKP	Yes	171	185	LPLIKQEDIKPEPDF

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## HHV6A IE2 (Q77Z83)

Gene: U90/U87/U86 ; Protein Family: IE

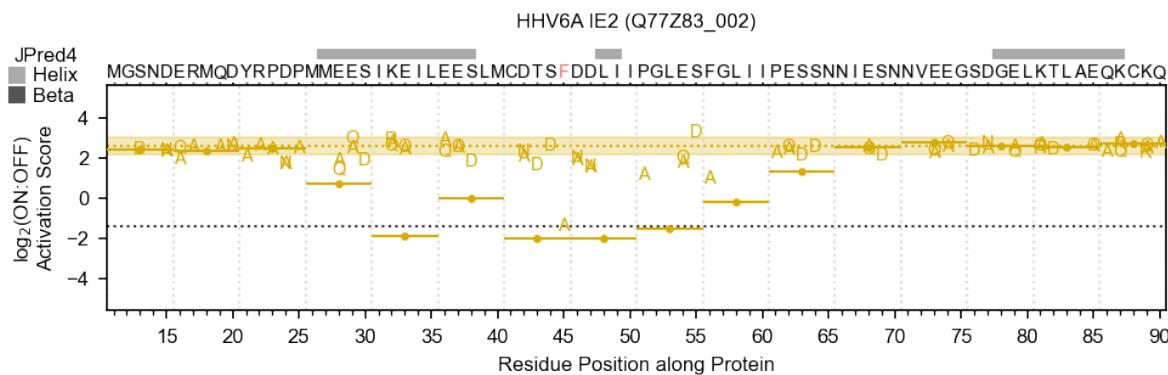


Extended activation domain from residues 1 to 110:

MEPAKPSGNMGSNDERMQDYRPDPMMEESIKEILEESLMCDTSFDDLIIPGLESFGLIIPESSNNIESNNVEEGSDGELKTLAEQKCKQGNDNDVIQSA  
MKLSGLYCD

Max tile of activation domain from residues 11 to 90 (estimated 86.5% to 91.0% of cells activated):

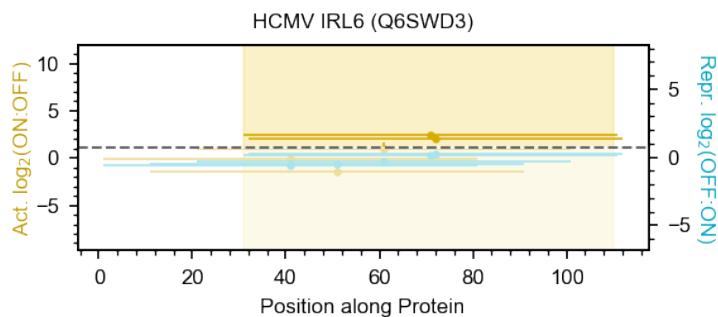
MGSNDERMQDYRPDPMMEESIKEILEESLMCDTSFDDLIIPGLESFGLIIPESSNNIESNNVEEGSDGELKTLAEQKCKQ



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	30	36	SIKEILE	Yes	31	35	IKEIL
flexi_NRBOX	44	50	SFDDLII	Yes	41	55	CDTSFDDLIIIPGLES
SUMO_rev	73	83	EEGSDGELKTL	No	-	-	

HCMV IRL6 (Q6SWD3)

Gene: RL6 ; Protein Family: IRL6



Extended activation domain from residues 31 to 111:

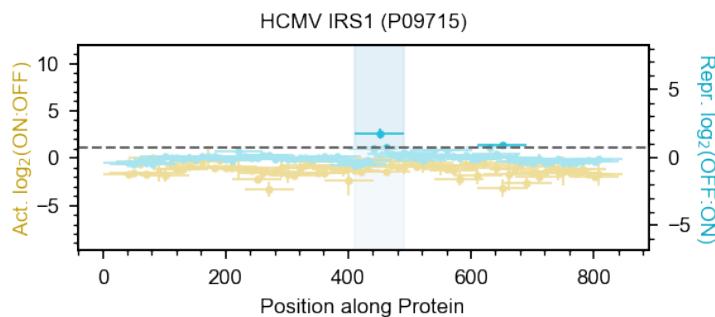
PLTTKWKTIVGNNGDQWLNCNVTGIGNATVNGNATICVSSCGHNTLDLCNLKSGDSGFFDLSRWFGENMDEYSGDVWHLEVS

Max tile of activation domain from residues 31 to 110 (estimated 5.4% to 6.3% of cells activated):

PLTTKWKTIVGNNGDQWLNCNVTGIGNATVNGNATICVSSCGHNTLDLCNLKSGDSGFFDLSRWFGENMDEYSGDVWHLEV

HCMV IRS1 (P09715)

Gene: IRS1 ; Protein Family: IRS1



Extended repression domain from residues 411 to 500:

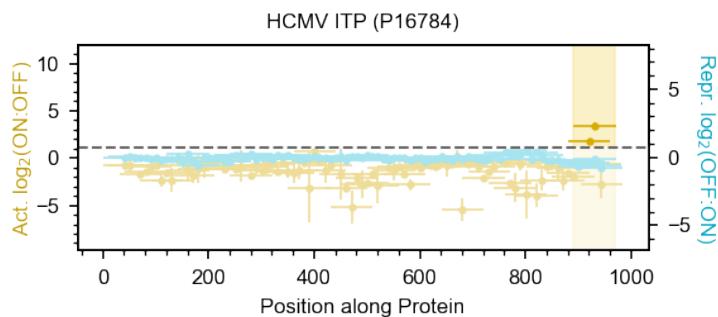
AAGGGAIICVPNADAHAVGADAAAAAAPTVMGSTAMAGPAASGTVPRAMLVVLLDELGAVFGYCPLDGHVYPLAAELSHFLRAGVLGAL

Max tile of repression domain from residues 411 to 490 (estimated 27.2% to 46.4% of cells repressed):

AAGGGAIICVPNADAHAVGADAAAAAAPTVMGSTAMAGPAASGTVPRAMLVVLLDELGAVFGYCPLDGHVYPLAAELSH

HCMV ITP (P16784)

Gene: UL47 ; Protein Family: ITP



Extended activation domain from residues 881 to 970:

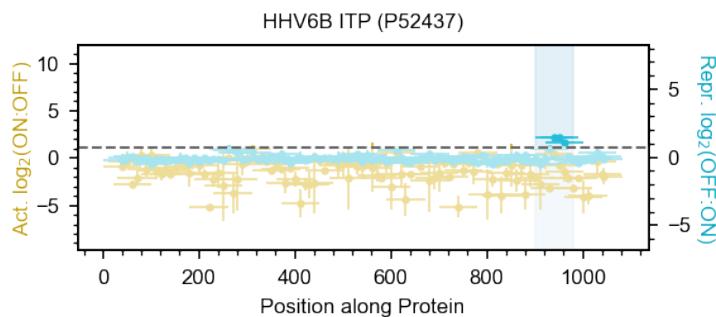
AGTGVAAAEADRALREFLEAPWESAPQPPRLRMTPTDHEESTAGATSVPEVLGARYEPAHLAASDLLNWYIVPVSQAQQDILSSIDPP

Max tile of activation domain from residues 891 to 970 (estimated 9.0% to 14.5% of cells activated):

ADRALREFLEAPWESAPQPPRLRMTPTDHEESTAGATSVPEVLGARYEPAHLAASDLLNWYIVPVSQAQQDILSSIDPP

HHV6B ITP (P52437)

Gene: U30 ; Protein Family: ITP



Extended repression domain from residues 901 to 1000:

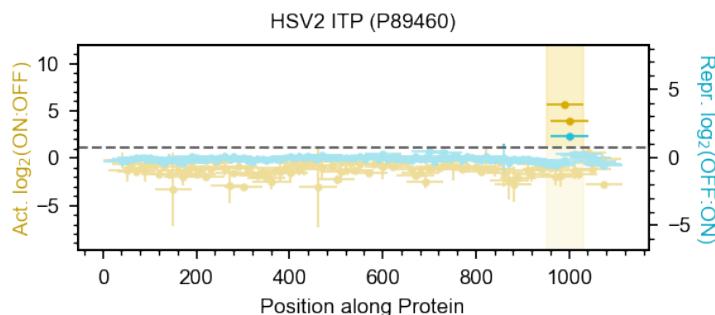
MLRNIITSVSSSKELLTNEALQKFIDTVQRISQHVNETYHSISVNLEKCKTSNDILIESLKKIIYIVDVLSSNAILNTSLASRCLEAANLAVSNNSFTIL

Max tile of repression domain from residues 901 to 980 (estimated 28.2% to 29.7% of cells repressed):

MLRNIITSVSSSKELLTNEALQKFIDTVQRISQHVNETYHSISVNLEKCKTSNDILIESLKKIIYIVDVLSSNAILNTSL

## HSV2 ITP (P89460)

Gene: UL37 ; Protein Family: ITP

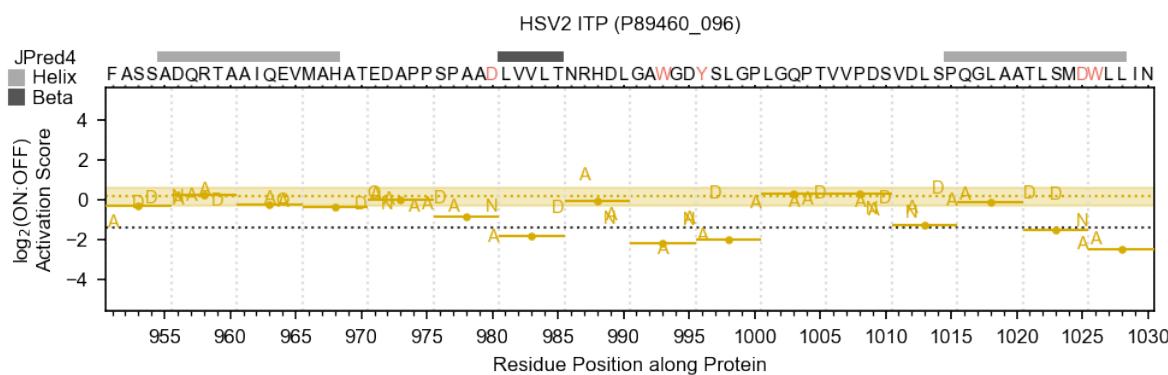


Extended activation domain from residues 951 to 1040:

FASSADQRTAAIQEVMAHATEDAPPSPAADLVVLTNRHDLGAWGDYSLGPLGQPTVPDSVDLSPQGLAATLSMDWLLINELLQVTDGVF

Max tile of activation domain from residues 951 to 1030 (estimated 45.0% to 53.0% of cells activated):

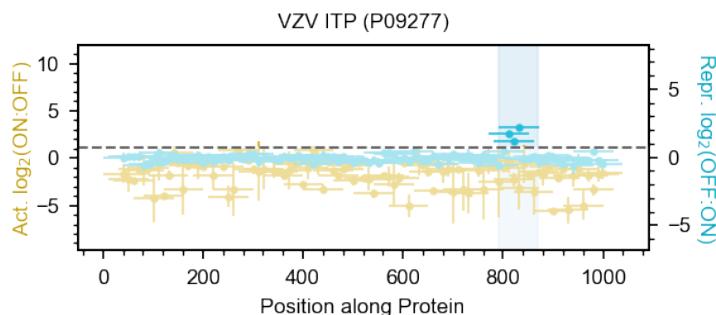
FASSADQRTAAIQEVMAHATEDAPPSPAADLVVLTNRHDLGAWGDYSLGPLGQPTVPDSVDLSPQGLAATLSMDWLLIN



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	980	985	DLVVLT	Yes	981	985	LVVLT
SUMO_SIM_par	980	985	DLVVLT	Yes	981	985	LVVLT
	-	-		No	991	1000	GAWGDYSLGP
	-	-		No	1021	1030	TLSMDWLLIN

## VZV ITP (P09277)

Gene: ORF21 ; Protein Family: ITP

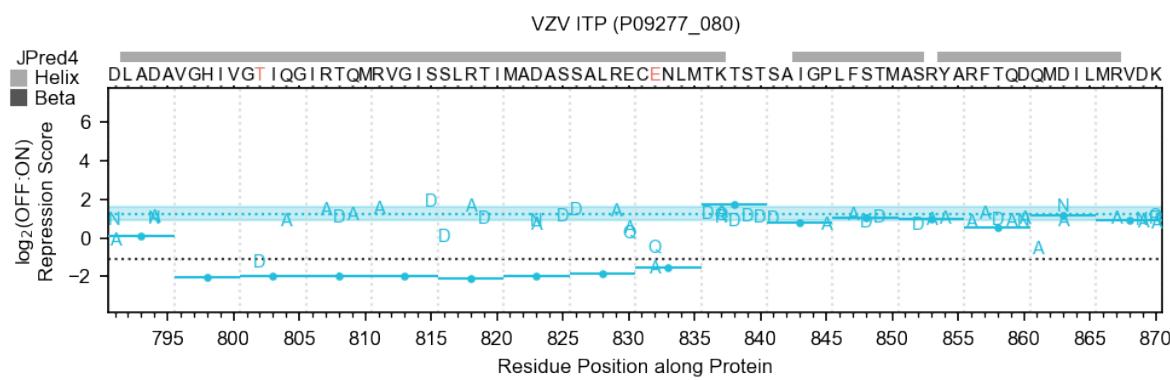


Extended repression domain from residues 771 to 870:

VGICNPKVERDEQFGVWRLNLDLADAVGHIVGTVIQGIRTQMRVGISSLRTIMADASSALRECEENLMKTSTSAIGPLFSTMASRYARFTQDQMDILMRVDK

Max tile of repression domain from residues 791 to 870 (estimated 45.5% to 50.5% of cells repressed):

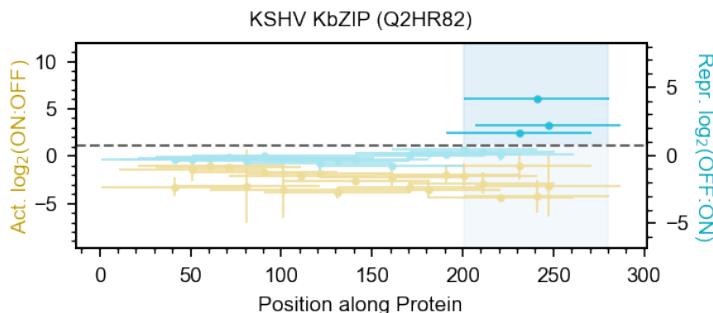
DLADAVGHIVGTVIQGIRTQMRVGISSLRTIMADASSALRECEENLMKTSTSAIGPLFSTMASRYARFTQDQMDILMRVDK



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	795	801	AVGHIVG	Yes	796	835	VGHIVGTVIQGIRTQMRVGISSLRTIMADASSALRECEENLM

## KSHV KbZIP (Q2HR82)

Gene: K8 ; Protein Family: KbZIP

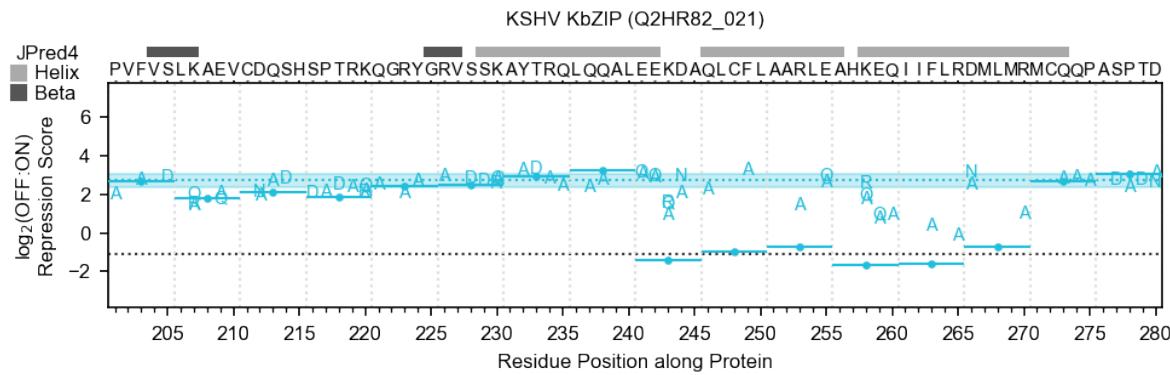


Extended repression domain from residues 191 to 286:

PAQPTHVLFSPVFVSLKAEVCDQSHSPTRKQGRYGRVSSKAYTRQLQQALEEKDAQLCFLAARLEAHKEQIIFLRDMLMRMCQQPASPTDAPLPPC

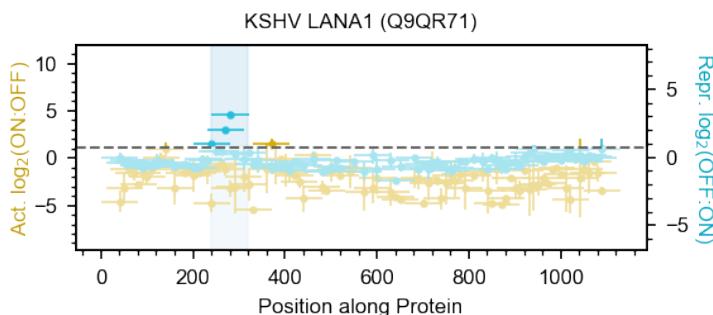
Max tile of repression domain from residues 201 to 280 (estimated 88.3% to 90.4% of cells repressed):

PVFVSLKAEVCDQSHSPTRKQGRYGRVSSKAYTRQLQQALEEKDAQLCFLAARLEAHKEQIIFLRDMLMRMCQQPASPTD



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	206	209	LKAE	No	-	-	
	-	-		No	241	245	EEKDA
	-	-		No	256	265	AHKEQIIFLR

**KSHV LANA1 (Q9QR71)**  
Gene: ORF73 ; Protein Family: LANA1

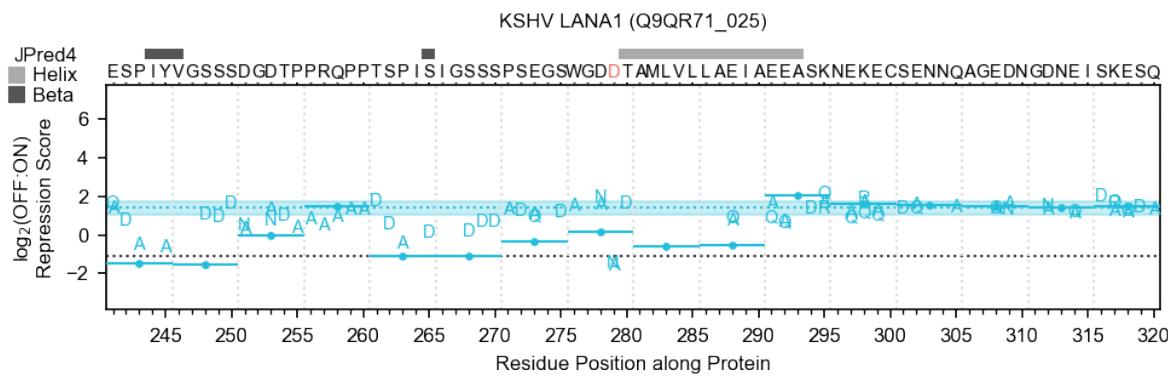


Extended repression domain from residues 231 to 320:

NRSVYPPWATESPIYVGSSSDGDTTPRQPPTSPISIGSSSPSEGSWGDDTAMLVLLAEIAEEASKNEKECSENNQAGEDNGDNEISKESQ

Max tile of repression domain from residues 241 to 320 (estimated 70.3% to 74.5% of cells repressed):

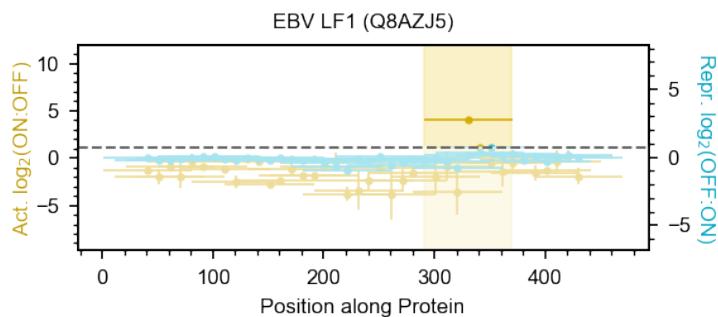
ESPIYVGSSSDGDTTPRQPPTSPISIGSSSPSEGSWGDDTAMLVLLAEIAEEASKNEKECSENNQAGEDNGDNEISKESQ



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	241	250	ESPIYVGSSS
WW_3	254	258	TPPRQ	No	-	-	
SUMO_SIM_par	261	270	TSPISIGSSS	Yes	261	270	TSPISIGSSS
SUMO_SIM_par	282	288	MLVLLAE	No	-	-	

EBV LF1 (Q8AZJ5)

Gene: LF1 ; Protein Family: LF1



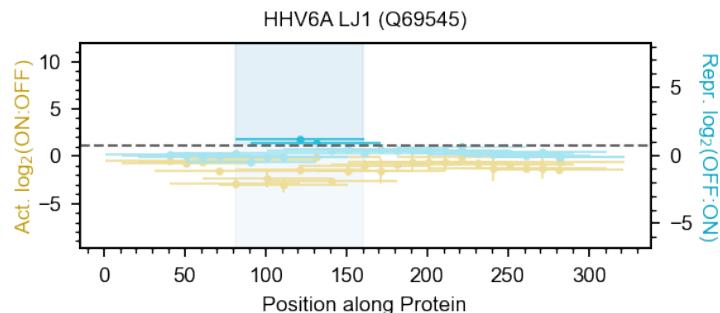
Extended activation domain from residues 291 to 380:

RAEEGWVCDVLLEPGPPTAREGCSLSMDPGLVTLKDAWTLFPLHPEHDAVVPPKEEIHVMAQGHLQGGTPSLWGFTFQEACDQWVLRPR

Max tile of activation domain from residues 291 to 370 (estimated 17.0% to 21.2% of cells activated):

RAEEGWVCDVLLEPGPPTAREGCSLSMDPGLVTLKDAWTLFPLHPEHDAVVPPKEEIHVMAQGHLQGGTPSLWGFTFQEAE

HHV6A LJ1 (Q69545)  
Gene: LJ1 ; Protein Family: LJ1



Extended repression domain from residues 81 to 170:

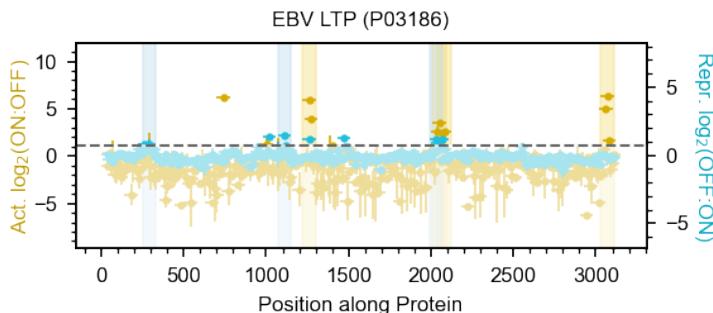
PSSALSGGAGGGSRIHDRVFRARRLGPQPMGSFFHASRSGARVGEKGASHSGVRARVGGWVRVRVVRVRVRVRVRVVRVRVVR

Max tile of repression domain from residues 81 to 160 (estimated 22.4% to 25.2% of cells repressed):

PSSALSGGAGGGSRIHDRVFRARRLGPQPMGSFFHASRSGARVGEKGASHSGVRARVGGWVRVRVVRVRVRVVRVVRVVR

## EBV LTP (P03186)

Gene: BPLF1 ; Protein Family: LTP



Extended repression domain from residues 241 to 330:

ETEDPRIFMLEHYGVYDFYEANGSGFDLVGPELVS~~DGEAAGTPGADSSPPVMLPFERRIIPYNLRLPLPSRSFTSDSFPAARYSPAKTNS~~

Max tile of repression domain from residues 251 to 330 (estimated 10.6% to 23.7% of cells repressed):

EHYG~~VYDFYEANGSGFDLVGPELVS~~~~DGEAAGTPGADSSPPVMLPFERRIIPYNLRLPLPSRSFTSDSFPAARYSPAKTNS~~

Extended repression domain from residues 1071 to 1160:

LG~~TALSDMSGIPWPLERVEEDDPSIALP~~EFETVAKKQKELETTRENEKRLRTILDDIEAMLGLAGVASAPGAPI~~SATPANHDNP~~

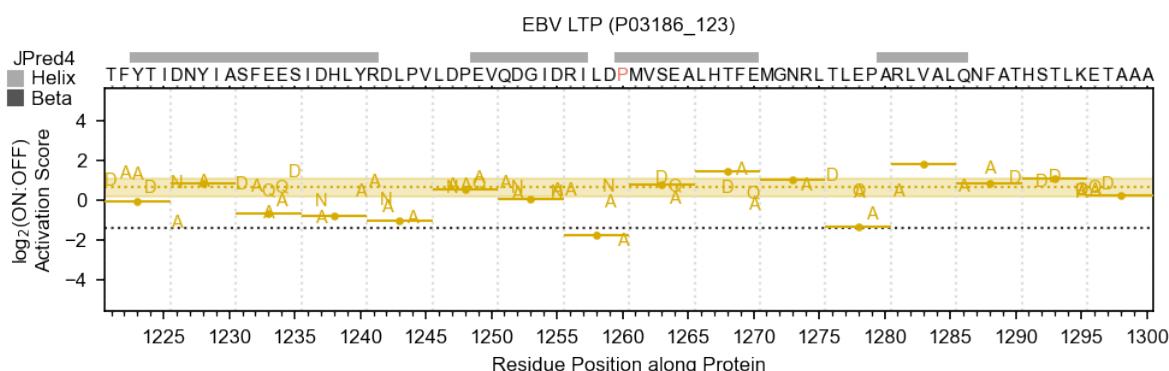
Max tile of repression domain from residues 1071 to 1150 (estimated 28.1% to 31.6% of cells repressed):

LG~~TALSDMSGIPWPLERVEEDDPSIALP~~EFETVAKKQKELETTRENEKRLRTILDDIEAMLGLAGVASAPGAPI~~SASP~~

Extended activation domain from residues 1221 to 1310:

TFYTIDNYIASFEESIDHLYRDL~~PVL~~DPEVQDG~~IDR~~ILDPMVSEALHTFEMGNRLTLEPARLVALQNFATHSTLKETA~~AAVNLLPGLLAV~~

Max tile of activation domain from residues 1221 to 1300 (estimated 50.6% to 56.1% of cells activated):

TFYTIDNYIASFEESIDHLYRDL~~PVL~~DPEVQDG~~IDR~~ILDPMVSEALHTFEMGNRLTLEPARLVALQNFATHSTLKETA~~AAA~~

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	1224	1230	TIDNYIA	No	-	-	
MYND_1	1244	1248	PVLDP	No	-	-	
flexi_NRBOX	1253	1259	GIDRILD	Yes	1256	1260	RILD <del>P</del>

Extended repression domain from residues 1991 to 2080:

TGWGNGAPTRRAQFLAAAGPAKYAGTLWLETESPCDPLNPAYVSADTQEPLNYIPVYHN~~FLEYVMPTVLENPEAFSLTPAGR~~QAI~~GPP~~QQD~~QERRR~~RTL

Max tile of repression domain from residues 1991 to 2070 (estimated 22.1% to 25.3% of cells repressed):

TGWGNGAPTRRAQFLAAAGPAKYAGTLWLETESPCDPLNPAYVSADTQEPLNYIPVYHN~~FLEYVMPTVLENPEAFSLTPA~~GR~~Q~~PPQDD~~QERRR~~RTL

Extended activation domain from residues 2001 to 2090:

RAQFLAAAGPAKYAGTLWLETESPCDPLNPAYVSADTQEPLNYIPVYHN~~FLEYVMPTVLENPEAFSLTPAGR~~QAI~~GPP~~QQD~~QERRR~~RTL

Max tile of activation domain from residues 2011 to 2090 (estimated 9.6% to 15.2% of cells activated):

AKYAGTLWLETESPCDPLNPAYVSADTQEPLNYIPVYHN~~FLEYVMPTVLENPEAFSLTPAGR~~QAI~~GPP~~QQD~~QERRR~~RTL

Extended activation domain from residues 2031 to 2120:

AYVSADTQEPLNYIPVYHNFLEYVMPTVLENPEAFSLTPAGRPAIGPPQDDQERRRTLASVASARLSAAAADSYWDTWPDVESNAGEL

Max tile of activation domain from residues 2041 to 2120 (estimated 5.8% to 6.3% of cells activated):

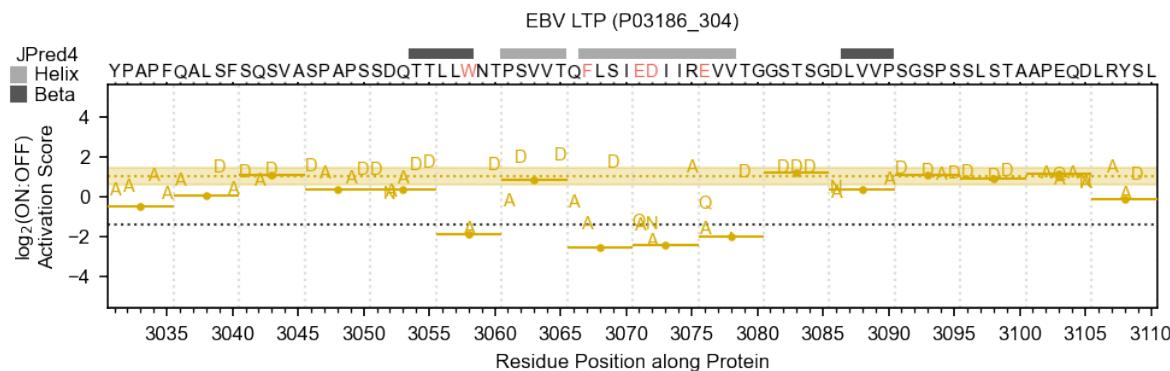
LYNIPVYHNFLEYVMPTVLENPEAFSLTPAGRPAIGPPQDDQERRRTLASVASARLSAAAADSYWDTWPDVESNAGEL

Extended activation domain from residues 3021 to 3120:

MYYPPSGSARYPAPFQALSFSQSVAASPAPSSDQTLLWNTPSVVTQFLSIEDIIREVVTGGSTSGDLVVPSGSPSSLSTAAPEQDLRYSLSQASRVL

Max tile of activation domain from residues 3031 to 3110 (estimated 63.5% to 64.1% of cells activated):

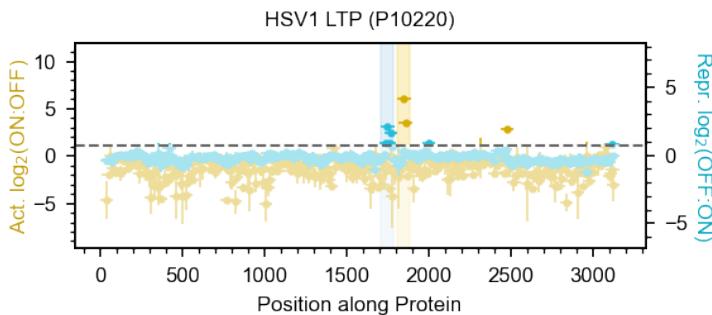
YPAPFQALSFSQSVAASPAPSSDQTLLWNTPSVVTQFLSIEDIIREVVTGGSTSGDLVVPSGSPSSLSTAAPEQDLRYSL



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	3056	3060	LLWNT
flexi_NRBOX	3063	3069	VVTQFLS	Yes	3066	3080	QFLSIEDIIREVVTG
flexi_NRBOX	3069	3075	SIEDIIR	Yes	3066	3080	QFLSIEDIIREVVTG
flexi_NRBOX	3073	3079	IIREVVT	Yes	3066	3080	QFLSIEDIIREVVTG
CtBP_expanded	3094	3098	PSSLS	No	-	-	

## HSV1 LTP (P10220)

Gene: UL36 ; Protein Family: LTP



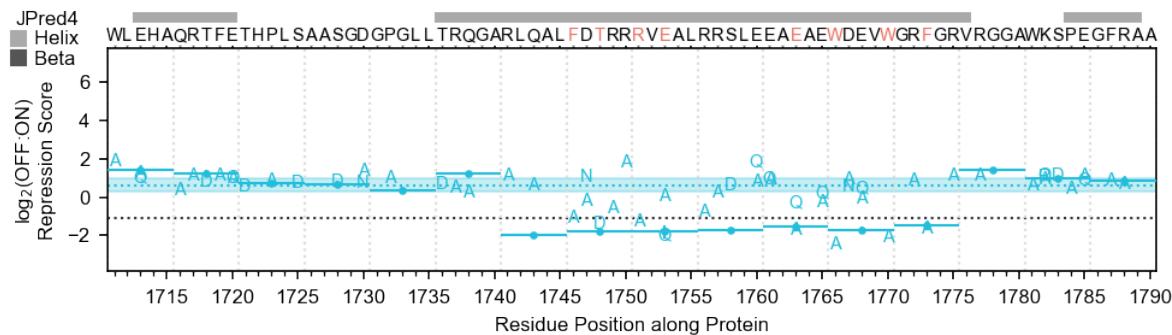
Extended repression domain from residues 1701 to 1810:

```
ARELDVQAVAWLEHAQRTFETHPLSAASGDGPGLLTRQGARLQALFDTRRRVEALRRSLEEAEEAEWDEVWGRFGRVRGGAWKSPEGFRAACEQLRA
LQDTNTVSGLRAQ
```

Max tile of repression domain from residues 1711 to 1790 (estimated 43.4% to 52.2% of cells repressed):

```
WLEHAQRTFETHPLSAASGDGPGLLTRQGARLQALFDTRRRVEALRRSLEEAEEAEWDEVWGRFGRVRGGAWKSPEGFRAA
```

## HSV1 LTP (P10220\_172)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	1741	1747	RLQALFD	Yes	1741	1775	RLQALFDTRRRVEALRRSLEEAEAEWDEVWGRFGRVRGGAWKSPEGFRAA

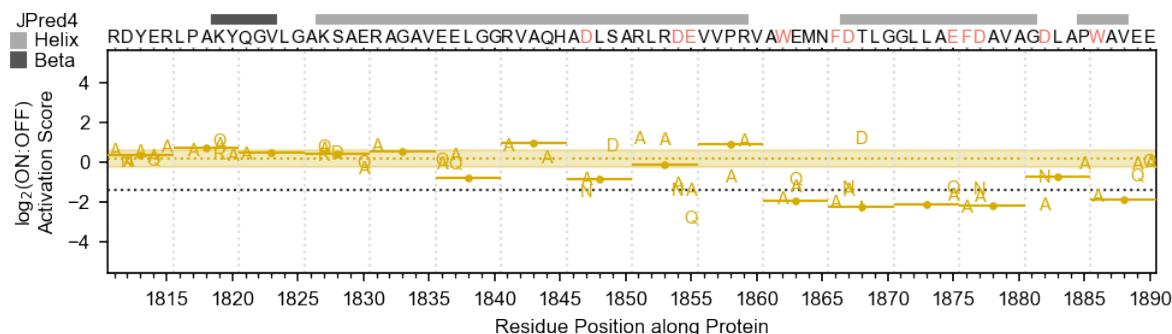
Extended activation domain from residues 1811 to 1900:

```
RDYERLPAKYQGVLGAKSAERAGAVEELGGRVAQHADLSARLRDEVVPRVAWEMNFDTLGGLLAEFDAVAGDLAPWAVEEFRGARELIQR
```

Max tile of activation domain from residues 1811 to 1890 (estimated 56.8% to 59.3% of cells activated):

```
RDYERLPAKYQGVLGAKSAERAGAVEELGGRVAQHADLSARLRDEVVPRVAWEMNFDTLGGLLAEFDAVAGDLAPWAVEE
```

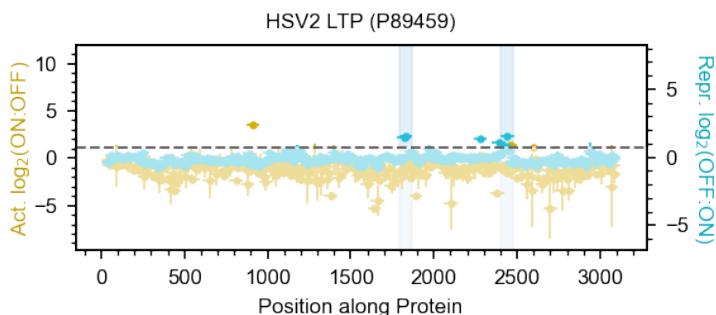
## HSV1 LTP (P10220\_182)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	1868	1874	TLGGLLA	Yes	1861	1880	AWEMNFDTLGGLLAEFDAVA
	-	-		No	1886	1890	WAVEE

HSV2 LTP (P89459)

Gene: UL36 ; Protein Family: LTP



Extended repression domain from residues 1781 to 1870:

PAYERLSARYQGVVLGAKGAERAEEAVEELGARVTKHTALCARLRDEVVRRVPWEMNFDALGGLLAEFDAAAADLAPWAVEEFRGARELIQY

Max tile of repression domain from residues 1791 to 1870 (estimated 29.3% to 31.9% of cells repressed):

QGVVLGAKGAERAEEAVEELGARVTKHTALCARLRDEVVRRVPWEMNFDALGGLLAEFDAAAADLAPWAVEEFRGARELIQY

Extended repression domain from residues 2391 to 2480:

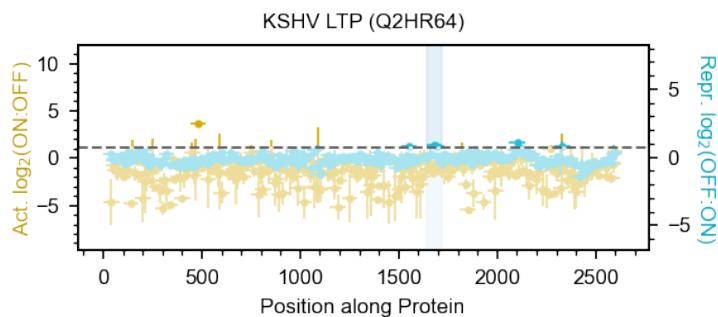
AQLPRLSALIAERPLADGPPCLVLVDISMPVAVLWEAPEPPGPPDVRFGSEATEELPFVATAGDVLAASAADADPFFARAILGRPFDA

Max tile of repression domain from residues 2401 to 2480 (estimated 31.8% to 32.2% of cells repressed):

AERPLADGPPCLVLVDISMPVAVLWEAPEPPGPPDVRFGSEATEELPFVATAGDVLAASAADADPFFARAILGRPFDA

KSHV LTP (Q2HR64)

Gene: ORF64 ; Protein Family: LTP



Extended repression domain from residues 1641 to 1730:

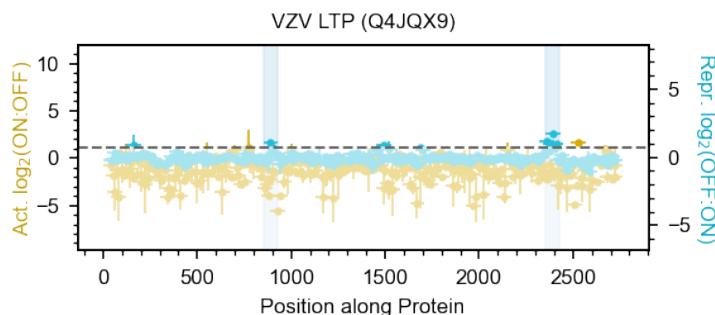
HFEATQSVVFTAFTPQEVTLIPALHYAGPFDNLERLSRYLHIGQTQPAPGQWLLTLPTFDPTRPACVPAGGHEPPLHRQVFSSFLEAQI

Max tile of repression domain from residues 1641 to 1720 (estimated 17.8% to 18.7% of cells repressed):

HFEATQSVVFTAFTPQEVTLIPALHYAGPFDNLERLSRYLHIGQTQPAPGQWLLTLPTFDPTRPACVPAGGHEPPLHRQV

VZV LTP (Q4JQX9)

Gene: ORF22 ; Protein Family: LTP



Extended repression domain from residues 851 to 940:

KTINTRATQRASAEAEELSCFNTLSAAVDQAVKDYETYNNGEVKYPEITRDDLLATIVRATDDLVRQIKILSDPMIQSGLQPSIKRRLETR

Max tile of repression domain from residues 851 to 930 (estimated 18.8% to 22.4% of cells repressed):

KTINTRATQRASAEAEELSCFNTLSAAVDQAVKDYETYNNGEVKYPEITRDDLLATIVRATDDLVRQIKILSDPMIQSGLQ

Extended repression domain from residues 2341 to 2430:

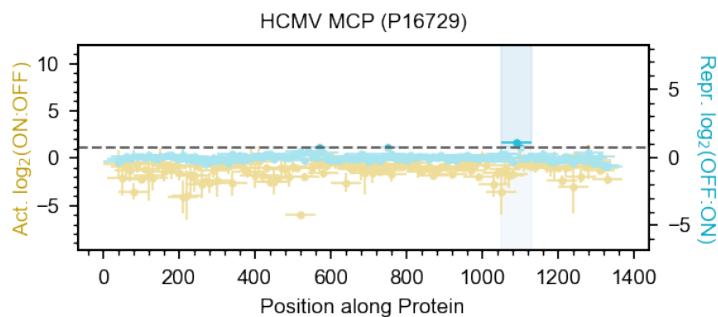
SALIANKPLTNNPPCLLLDEHMNPSYVLWERKD SIPAPD YVVF WGPESL IDLPYIDS DEDSF PSCP DDPF YSQIIAGYAP QGPPNLDTT

Max tile of repression domain from residues 2351 to 2430 (estimated 34.4% to 37.8% of cells repressed):

NNPPCCLL DEHMNPSYVLWERKD SIPAPD YVVF WGPESL IDLPYIDS DEDSF PSCP DDPF YSQIIAGYAP QGPPNLDTT

HCMV MCP (P16729)

Gene: UL86 ; Protein Family: MCP



Extended repression domain from residues 1051 to 1140:

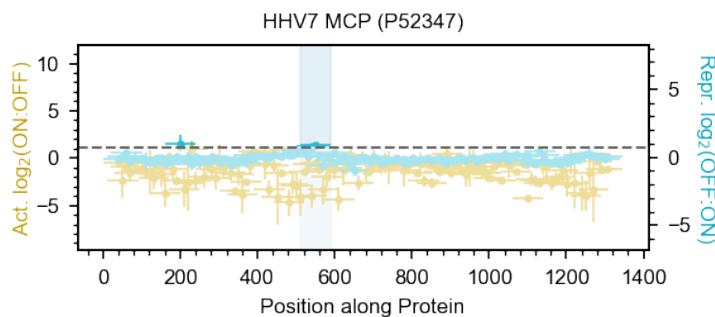
GKSCTSVIINNPIVTKEERDISTTYHVTQNINTVDMGLGYTSNTCVAYVNVRVTDGVRVQDLFRVFPMNVYRHDEVDRWIRHAAGVERP

Max tile of repression domain from residues 1051 to 1130 (estimated 17.7% to 24.2% of cells repressed):

GKSCTSVIINNPIVTKEERDISTTYHVTQNINTVDMGLGYTSNTCVAYVNVRVTDGVRVQDLFRVFPMNVYRHDEVDRW

HHV7 MCP (P52347)

Gene: U57 ; Protein Family: MCP



Extended repression domain from residues 501 to 590:

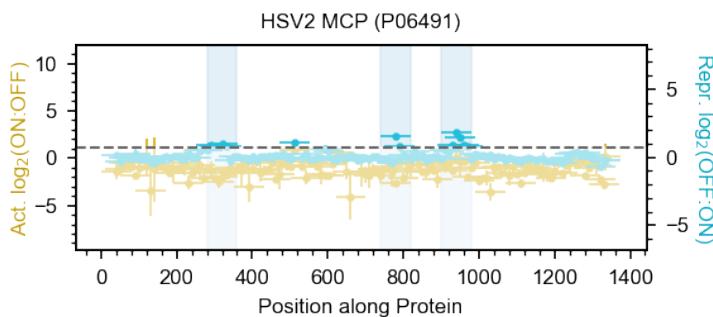
MKKEIPKTTNMLKNELTTEDFYKSENFTLKTTELHPFFDFTYIQKNRSTDVLCSPRILLGNIPLPLAPSSFHEARTNQMIEQAKTNNLNYD

Max tile of repression domain from residues 511 to 590 (estimated 14.1% to 19.4% of cells repressed):

MLKNELTTEDFYKSENFTLKTTELHPFFDFTYIQKNRSTDVLCSPRILLGNIPLPLAPSSFHEARTNQMIEQAKTNNLNYD

## HSV2 MCP (P06491)

Gene: UL19 ; Protein Family: MCP



Extended repression domain from residues 251 to 370:

LTATQPSVAVPRLTHADTRGRPVDGVLVTAPIKQRLLQSFLKVEDTEADVPVTYGEMVLNGANLVTALVMGKAVRSLLDVGRHLLEMQEEQLDLNRQ  
TLDELESAPQTTRVRADLVS

Max tile of repression domain from residues 281 to 360 (estimated 17.3% to 19.8% of cells repressed):

TAPIKQRLLQSFLKVEDTEADVPVTYGEMVLNGANLVTALVMGKAVRSLLDVGRHLLEMQEEQLDLNRQTLDELESAPQT

Extended repression domain from residues 741 to 830:

ALMRRAALDRHRDCRVSAGGHDPVYAAACNVATADFNRRNDGQLLHNTQARAADAADDRPHRGADWTVHHKIYYYVMVPAFSRGRCCTAGV

Max tile of repression domain from residues 741 to 820 (estimated 29.5% to 33.8% of cells repressed):

ALMRRAALDRHRDCRVSAGGHDPVYAAACNVATADFNRRNDGQLLHNTQARAADAADDRPHRGADWTVHHKIYYYVMVPAF

Extended repression domain from residues 891 to 1010:

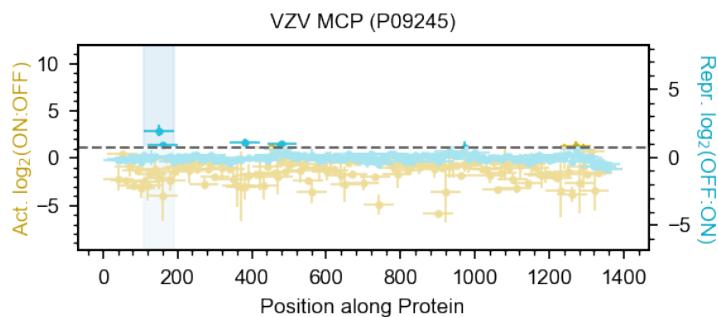
MLTLQVLAHNMAERTTALLCSAAPDAGANTASTTNMRIFDGALHAGILLMAPQHLDHTIQNGDYFYPLPVHALFAGADHVANAPNFPPALRDLSRQVPLV  
PPALGANYFSSIRQPVVQHV

Max tile of repression domain from residues 901 to 980 (estimated 40.0% to 40.2% of cells repressed):

MAERTTALLCSAAPDAGANTASTTNMRIFDGALHAGILLMAPQHLDHTIQNGDYFYPLPVHALFAGADHVANAPNFPPAL

VZV MCP (P09245)

Gene: ORF40 ; Protein Family: MCP



Extended repression domain from residues 111 to 200:

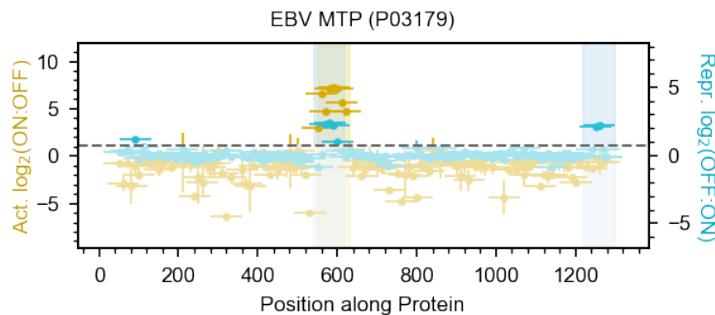
VQQPMIARDGPHPVDQPVHNYMVKRIHKRSLSAAFIASEALSLLSNTYVDGTEIDSSLRIRAIQQMARNLRTVLDSFERGTADQLLGVL

Max tile of repression domain from residues 111 to 190 (estimated 30.9% to 53.7% of cells repressed):

VQQPMIARDGPHPVDQPVHNYMVKRIHKRSLSAAFIASEALSLLSNTYVDGTEIDSSLRIRAIQQMARNLRTVLDSFER

## EBV MTP (P03179)

Gene: BNRF1 ; Protein Family: MTP

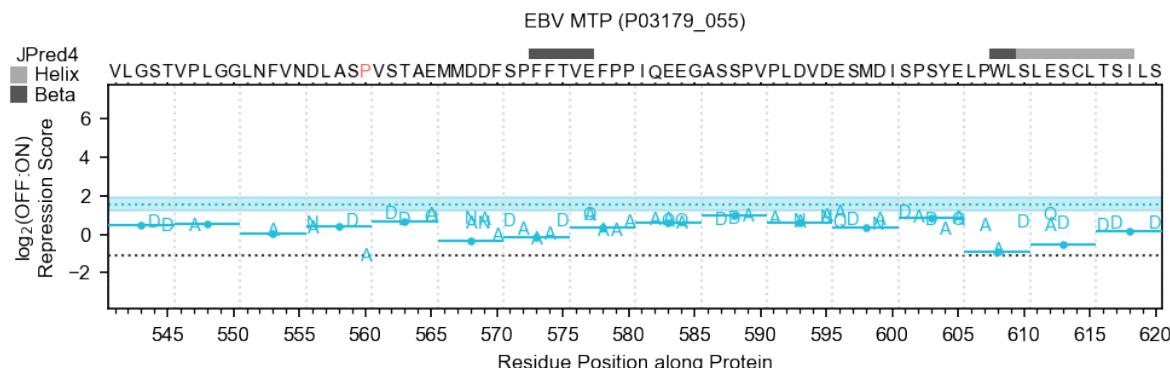


Extended repression domain from residues 531 to 640:

ACDMAGCQHYVLGSTVPLGGNFVNDL ASPVSTAEMMDDFSPFFTVEFPPIQEEGASSPVPLDVDESMDISPSYELPWLSLESCLTSILSHPTVGSKEHL  
VRHTDRVSGG

Max tile of repression domain from residues 541 to 620 (estimated 53.6% to 56.3% of cells repressed):

VLGSTVPLGGNFVNDL ASPVSTAEMMDDFSPFFTVEFPPIQEEGASSPVPLDVDESMDISPSYELPWLSLESCLTSILS



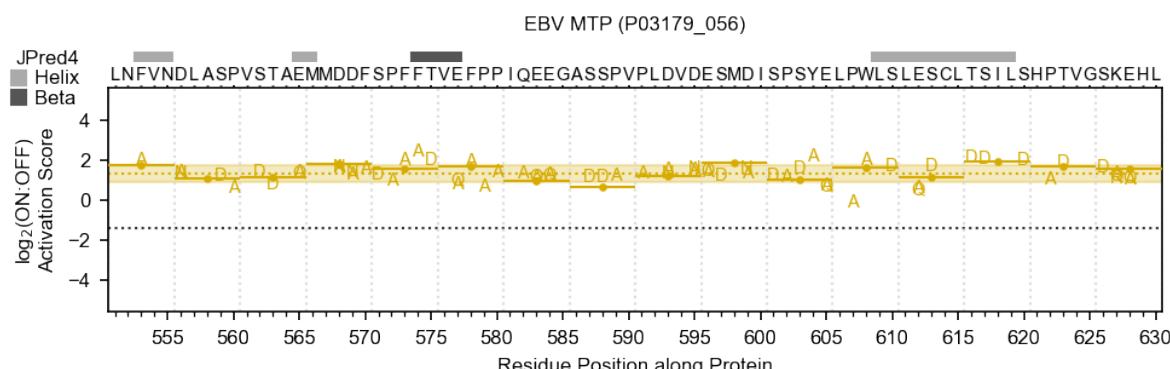
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	590	597	VPLDVDES	No	-	-	
flexi_NRBOX	614	620	CLTSILS	No	-	-	

Extended activation domain from residues 511 to 660:

TVRQRGEKINGRTVLQALGRACDMAGCQHYVLGSTVPLGGNFVNDL ASPVSTAEMMDDFSPFFTVEFPPIQEEGASSPVPLDVDESMDISPSYELPWLSLESCLTSILSHPTVGSKEHLVRHTDRVSGGRVAQQPGVGPLDLPLADYAF

Max tile of activation domain from residues 551 to 630 (estimated 78.0% to 82.2% of cells activated):

LNFVNDL ASPVSTAEMMDDFSPFFTVEFPPIQEEGASSPVPLDVDESMDISPSYELPWLSLESCLTSILSHPTVGSKEHL



**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

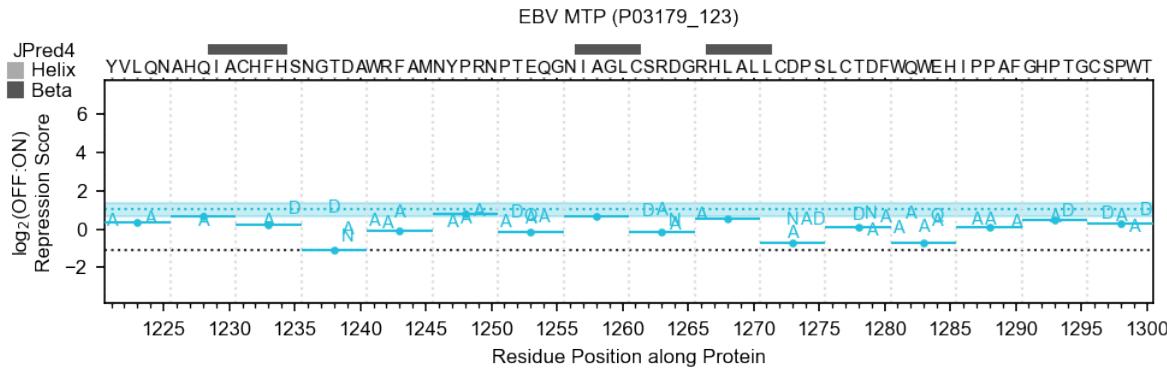
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	590	597	VPLDVDES	No	-	-	
flexi_NRBOX	614	620	CLTSILS	No	-	-	

Extended repression domain from residues 1211 to 1300:

GLQFTNLGMPYVLQNAHQIACHFHSNGTDAWRFAMNYPRNPTEQGNIAGLCSRDRHLALLCDPSLCTDFWQWEHIPPAFGHPTGCSPWT

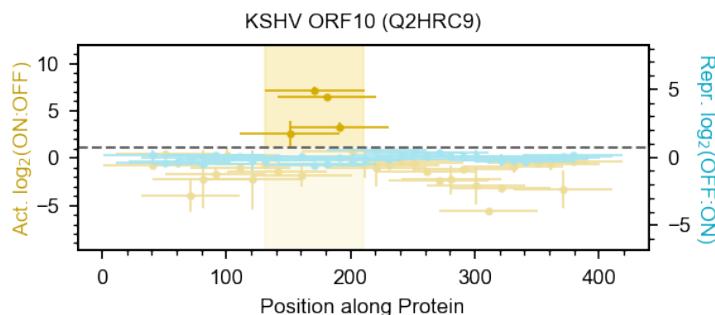
Max tile of repression domain from residues 1221 to 1300 (estimated 47.6% to 48.7% of cells repressed):

YVLQNAHQIACHFHSNGTDAWRFAMNYPRNPTEQGNIAGLCSRDRHLALLCDPSLCTDFWQWEHIPPAFGHPTGCSPWT



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	-	-	

**KSHV ORF10 (Q2HRC9)**  
Gene: ORF10 ; Protein Family: ORF10

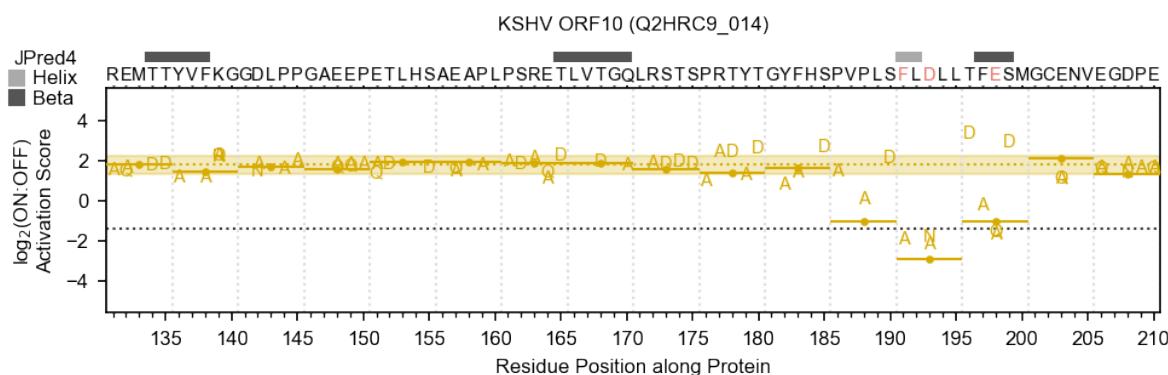


Extended activation domain from residues 131 to 230:

REMTTYVFKGGDLPPGAEEPETLHSAEAPLPSRETLVTGQLRSTSPRTYTGYFHSPVPLSFLDLLTFESMGCENVEGDPEPLTPKYLTFTQTGERLYKVT

Max tile of activation domain from residues 131 to 210 (estimated 72.5% to 83.0% of cells activated):

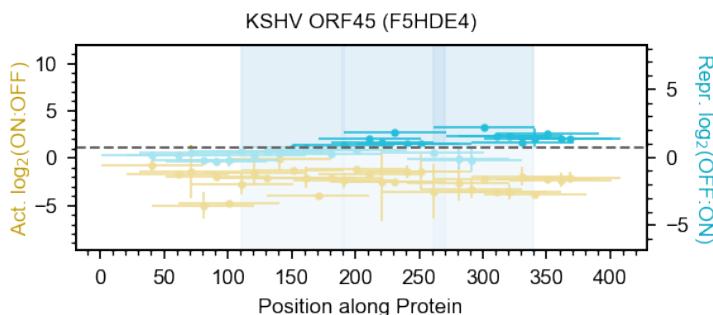
REMTTYVFKGGDLPPGAEEPETLHSAEAPLPSRETLVTGQLRSTSPRTYTGYFHSPVPLSFLDLLTFESMGCENVEGDPE



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	190	196	SFLDLLT	Yes	191	195	FLDLL
flexi_NRBOX	190	196	SFLDLLT	Yes	191	195	FLDLL

## KSHV ORF45 (F5HDE4)

Gene: ORF45 ; Protein Family: ORF45



Extended repression domain from residues 111 to 200:

EDEPEGYPADFFQPLSHLRPRPLARRAHTPKPVAVVAGRVRSSSTDAESEASMGWVSQDDGFSPAGLSPSDDEGVAILEPMAAYTGTGAY

Max tile of repression domain from residues 111 to 190 (estimated 13.1% to 16.6% of cells repressed):

EDEPEGYPADFFQPLSHLRPRPLARRAHTPKPVAVVAGRVRSSSTDAESEASMGWVSQDDGFSPAGLSPSDDEGVAILEP

Extended repression domain from residues 171 to 290:

GFSPAGLSPSDDEGVAILEPMAAYTGTGAYGLSPASRNSVPGTQSSPYSDPDEGPSWRPLRAAPTAIVDLTSDSDSSNSPDVNNEAAFTDARHFS HQPPSSEEDGEDQGEVLSQRIG

Max tile of repression domain from residues 191 to 270 (estimated 36.2% to 39.4% of cells repressed):

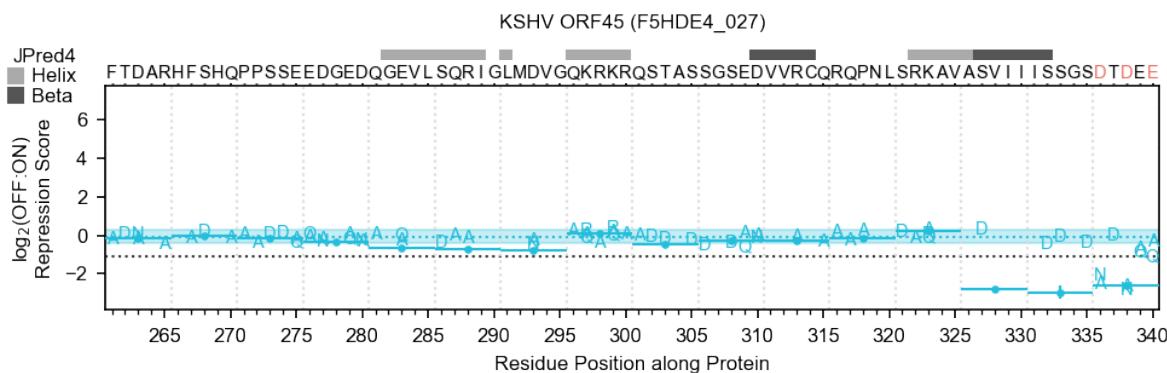
MAAYTGTGAYGLSPASRNSVPGTQSSPYSDPDEGPSWRPLRAAPTAIVDLTSDSDSSNSPDVNNEAAFTDARHFSHQ

Extended repression domain from residues 261 to 407:

FTDARHFSHQPPSSEEDGEDQGEVLSQRIGLMVGQKRKRQSTASSGSEDVVRCQRQPNLRSRKAVASVIISSGSDTDEEPSSAVSVIVSPSSTKGHLPTQSPSTSAHSISSGSTTAGSRCSDPTRILASTPPLCGNGAYNWPWLD

Max tile of repression domain from residues 261 to 340 (estimated 46.4% to 50.0% of cells repressed):

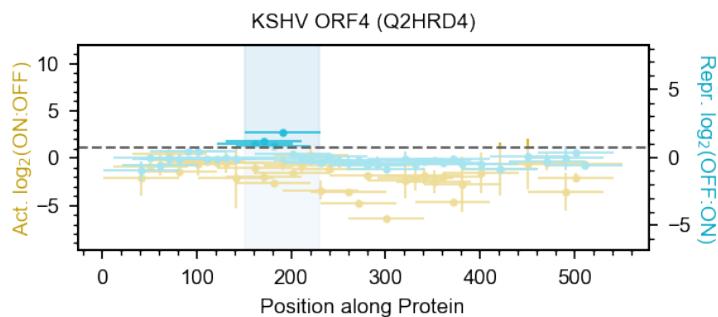
FTDARHFSHQPPSSEEDGEDQGEVLSQRIGLMVGQKRKRQSTASSGSEDVVRCQRQPNLRSRKAVASVIISSGSDTDEE



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	324	330	AVASVII	Yes	326	340	ASVIISSGSDTDEE
SUMO_SIM_par	327	333	SVIIISS	Yes	326	340	ASVIISSGSDTDEE
SUMO_SIM_anti	327	333	SVIIISS	Yes	326	340	ASVIISSGSDTDEE

KSHV ORF4 (Q2HRD4)

Gene: ORF4 ; Protein Family: ORF4



Extended repression domain from residues 121 to 230:

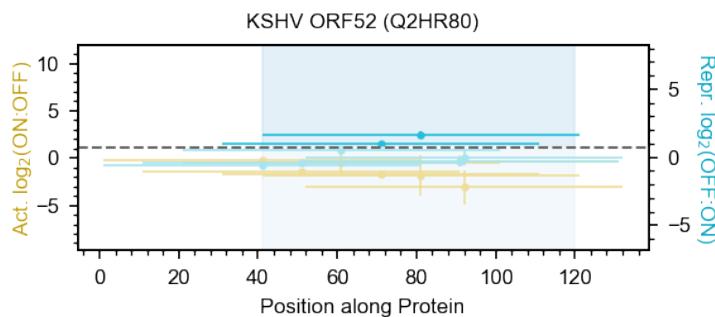
FLVGREYVRYCMIGASGQMAWSSSPFCEKEKCHRPKIENGDFKPDKDYYEYNDAVHFECNEGVTLVGPHSIACAVNNTWSNMPTCELAGCKFPSVT  
HGYPIQGFSLTY

Max tile of repression domain from residues 151 to 230 (estimated 37.4% to 40.8% of cells repressed):

EKCHRPKIENGDFKPDKDYYEYNDAVHFECNEGVTLVGPHSIACAVNNTWSNMPTCELAGCKFPSVTHGYPIQGFSLTY

KSHV ORF52 (Q2HR80)

Gene: ORF52 ; Protein Family: ORF52



Extended repression domain from residues 31 to 120:

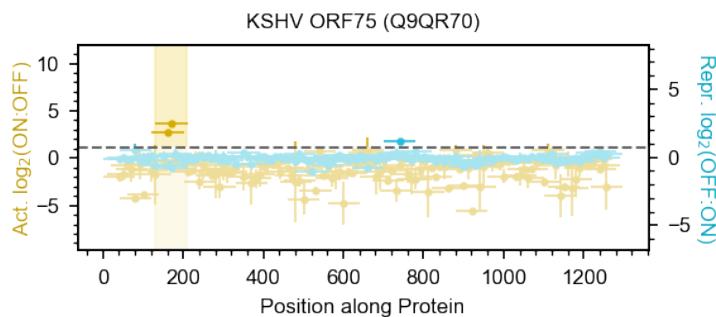
LRKALGSTADPRDRPLTATEKEAQLTATVGALSAAAACKIEARVRTIFSKVVTQKVDDALKGLSLRIDVCMSDGGTAKPPPGANNRRRR

Max tile of repression domain from residues 41 to 120 (estimated 26.1% to 41.1% of cells repressed):

PRDRPLTATEKEAQLTATVGALSAAAACKIEARVRTIFSKVVTQKVDDALKGLSLRIDVCMSDGGTAKPPPGANNRRRR

KSHV ORF75 (Q9QR70)

Gene: ORF75 ; Protein Family: ORF75



Extended activation domain from residues 121 to 210:

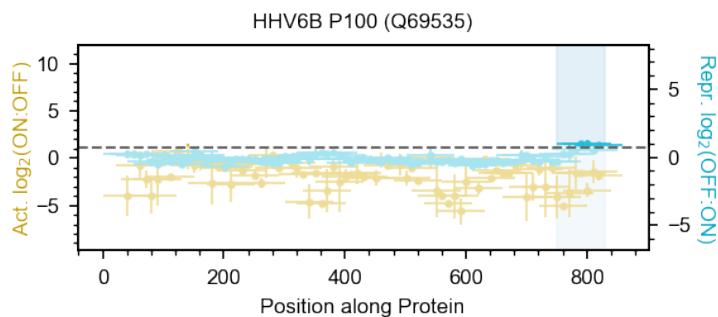
LGLQEWARVEVGRHLVSKITQTLLEPHPPQFIRAFQTQNTDLVPYEGLEVPEGPQPVARPHIEDDVIMQAVMISLGADLLPLAVQASTGDN

Max tile of activation domain from residues 131 to 210 (estimated 12.9% to 13.4% of cells activated):

VGRHLVSKITQTLLEPHPPQFIRAFQTQNTDLVPYEGLEVPEGPQPVARPHIEDDVIMQAVMISLGADLLPLAVQASTGDN

HHV6B P100 (Q69535)

Gene: U11 ; Protein Family: P100



Extended repression domain from residues 751 to 840:

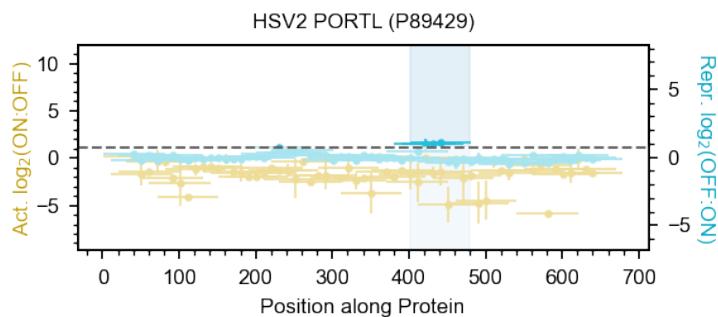
LSRDLDSSFKDALDVKLPGNGEREIDLALQKVKAGERETSDFKVGQDETTLIPTQLMKVETPEEKDDVIEKMVLIRQDG

Max tile of repression domain from residues 751 to 830 (estimated 17.4% to 22.0% of cells repressed):

LSRDLDSSFKDALDVKLPGNGEREIDLALQKVKAGERETSDFKVGQDETTLIPTQLMKVETPEEKDDVIEKMVLIRQDG

HSV2 PORTL (P89429)

Gene: UL6 ; Protein Family: PORTL



Extended repression domain from residues 381 to 480:

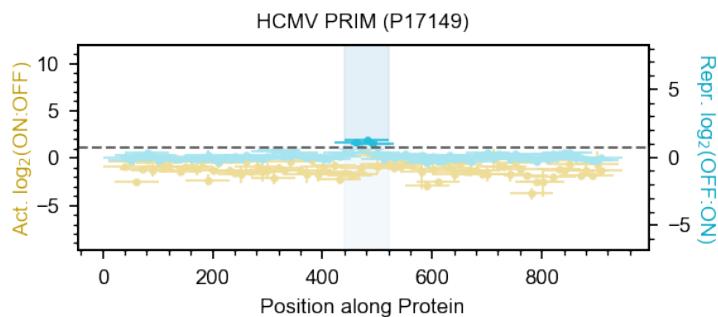
TLPFGKGGTGRGSRPQDPGARPQLRQAFQTAVVNNINGMLEGYINNLFGTIERLRETNAGLATQLQARDRELRRQAQAGALEREQRAADRAAGGGA  
GRP

Max tile of repression domain from residues 401 to 480 (estimated 18.0% to 24.8% of cells repressed):

ARPQQLRQAFQTAVVNNINGMLEGYINNLFGTIERLRETNAGLATQLQARDRELRRQAQAGALEREQRAADRAAGGGAGRP

HCMV PRIM (P17149)

Gene: UL70 ; Protein Family: PRIM



Extended repression domain from residues 441 to 530:

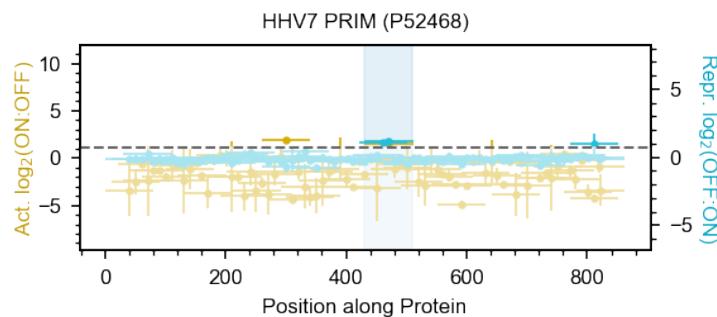
NDQHVFCAVASETWHRSLFPRDLLRHVPDSRFSDEALTETVWLHDDDASTSPETQFYYTRHEVFNERLPVFNFVADFDLRLRDGVGLA

Max tile of repression domain from residues 441 to 520 (estimated 23.8% to 24.5% of cells repressed):

NDQHVFCAVASETWHRSLFPRDLLRHVPDSRFSDEALTETVWLHDDDASTSPETQFYYTRHEVFNERLPVFNFVADFDL

HHV7 PRIM (P52468)

Gene: U43 ; Protein Family: PRIM



Extended repression domain from residues 421 to 510:

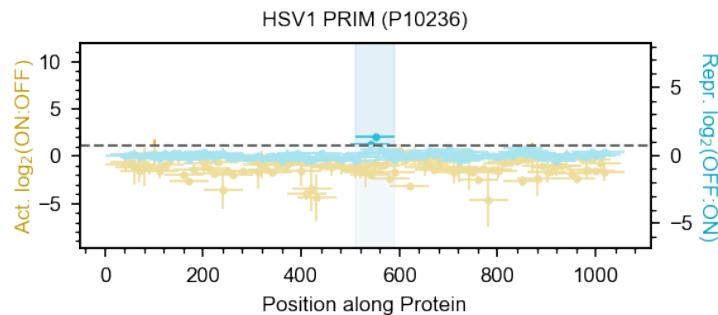
YCFGSAESWYKNMbfdQVMQFLPNEYISDESLTSTFWLQDTTFLSDEIEKQFYVTRHEIFNEYLPVTNYIGDLDLPLQDSAIITESLFFS

Max tile of repression domain from residues 431 to 510 (estimated 18.8% to 25.6% of cells repressed):

KNMbfdQVMQFLPNEYISDESLTSTFWLQDTTFLSDEIEKQFYVTRHEIFNEYLPVTNYIGDLDLPLQDSAIITESLFFS

HSV1 PRIM (P10236)

Gene: UL52 ; Protein Family: PRIM



Extended repression domain from residues 501 to 590:

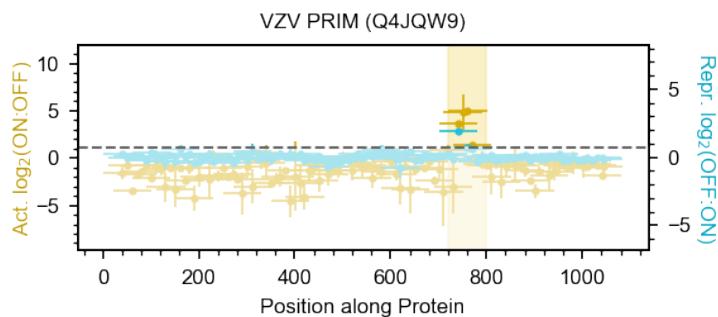
VKRLLRLAATEQQGPTPPAIAALIRNAAVQTPLPVYRISMVPTGQFAALAWDDWARITRDARLAEAVVSAEAAAHPDHGALGRR LTDRI

Max tile of repression domain from residues 511 to 590 (estimated 22.9% to 30.4% of cells repressed):

EQQGPTPPAIAALIRNAAVQTPLPVYRISMVPTGQFAALAWDDWARITRDARLAEAVVSAEAAAHPDHGALGRR LTDRI

VZV PRIM (Q4JQW9)

Gene: ORF6 ; Protein Family: PRIM



Extended activation domain from residues 701 to 810:

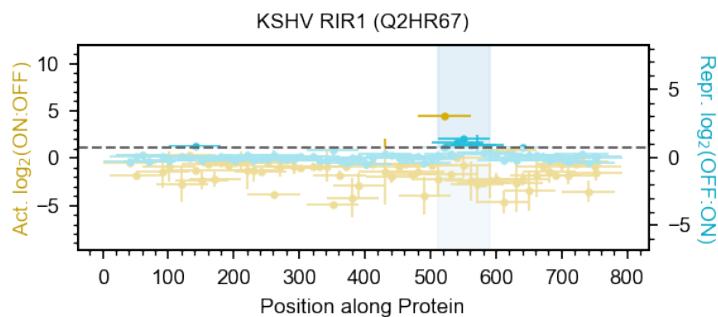
LFPKAVVNPNDPCYFYKTACPEPTVEVLDDDNLLDTSHSDIDFYIENGELYTCVEENYTEDVWFFDTQTTSEVHTHADVSNNENLHETLPCNCKEKIGF  
RVCVIPNP

Max tile of activation domain from residues 721 to 800 (estimated 30.9% to 35.4% of cells activated):

CPEPTVEVLDDDNLLDTSHSDIDFYIENGELYTCVEENYTEDVWFFDTQTTSEVHTHADVSNNENLHETLPCNCKEKIG

KSHV RIR1 (Q2HR67)

Gene: ORF61 ; Protein Family: RIR1



Extended repression domain from residues 501 to 610:

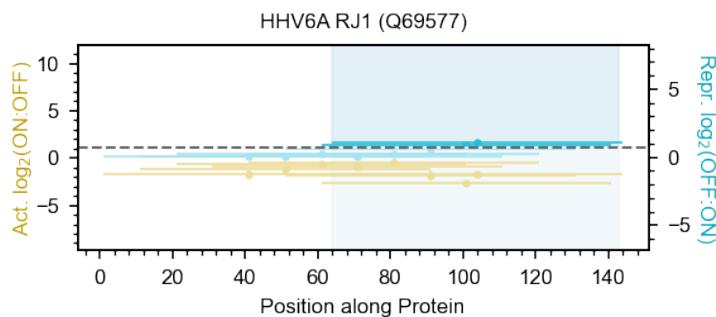
IGVQGLADVFAELGYGYLDAESAELDKNIFQSMYYTAVETSHNLVLEGQGVPHGWEVSNAFKGRFHWTWEGEDASFVPRHRWDALGKIAEHGIFNSQFLAVMPTAGT

Max tile of repression domain from residues 511 to 590 (estimated 26.0% to 29.1% of cells repressed):

AELGYGYLDAESAELDKNIFQSMYYTAVETSHNLVLEGQGVPHGWEVSNAFKGRFHWTWEGEDASFVPRHRWDALGKS

HHV6A RJ1 (Q69577)

Gene: RJ1 ; Protein Family: RJ1



Extended repression domain from residues 61 to 143:

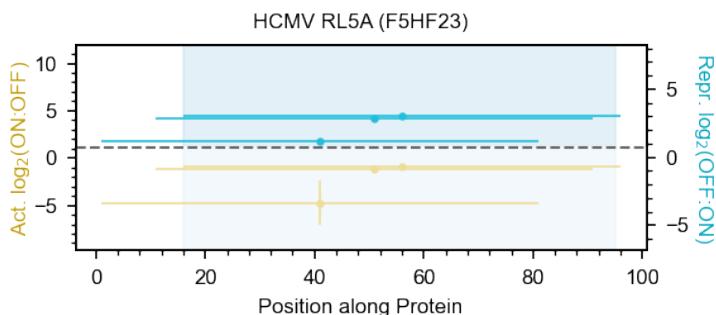
RVVRVRARPRVVRVVRARPRVVRVRASPRVVRVITPPFFSPPGGFDVIFKTRGIPSPGETVLDKKVSRPWRGLTSRRGATMI

Max tile of repression domain from residues 64 to 143 (estimated 17.8% to 23.6% of cells repressed):

VRARPRVVRVVRARPRVVRVRASPRVVRVITPPFFSPPGGFDVIFKTRGIPSPGETVLDKKVSRPWRGLTSRRGATMI

## HCMV RL5A (F5HF23)

Gene: RL5A ; Protein Family: RL5A

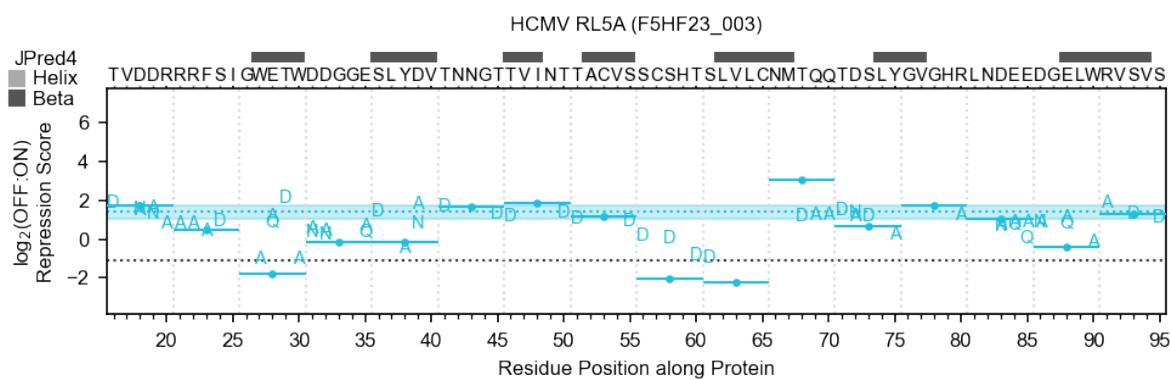


Extended repression domain from residues 1 to 95:

MDMRKLNTSQGRNLTTVDDRRRFSIGWETWDDGGESLYDVTNNGTTVINTTACVSSCSHTSLVLCNMTQQTDSLYGVGVHRLNDEEDGELWRVSVS

Max tile of repression domain from residues 16 to 95 (estimated 70.0% to 72.0% of cells repressed):

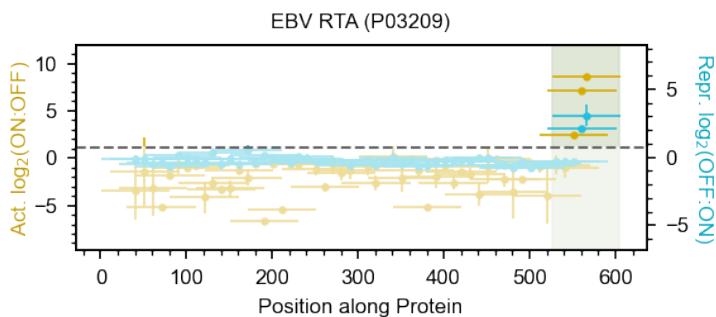
TVDDRRRFSIGWETWDDGGESLYDVTNNGTTVINTTACVSSCSHTSLVLCNMTQQTDSLYGVGVHRLNDEEDGELWRVSVS



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	26	30	GWETW
-	-	-		No	56	65	SCSHTSLVLC

## EBV RTA (P03209)

Gene: BRLF1 ; Protein Family: RTA



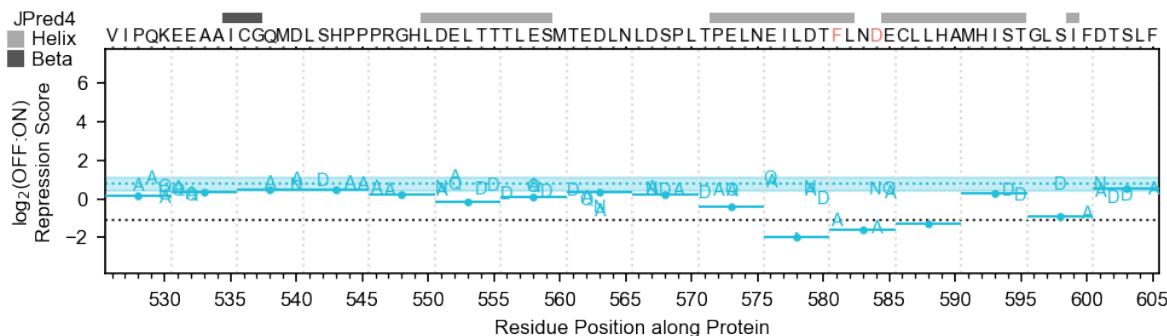
Extended repression domain from residues 521 to 605:

EMADTVIPQKEEAAICGQMDSLHPPPRGHLDLTTLESMTEDLNLDSPLTPELNEILDTLNDECLLHAMHISTGLSIFDTSLF

Max tile of repression domain from residues 526 to 605 (estimated 51.4% to 85.8% of cells repressed):

VIPQKEEAAICGQMDSLHPPPRGHLDLTTLESMTEDLNLDSPLTPELNEILDTLNDECLLHAMHISTGLSIFDTSLF

## EBV RTA (P03209\_054)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
WW_3	544	548	PPPRG	No	-	-	
flexi_NRBOX	573	579	ELNEILD	Yes	576	590	EILDTLNDECLLHA
flexi_NRBOX	577	583	ILDTFLN	Yes	576	590	EILDTLNDECLLHA

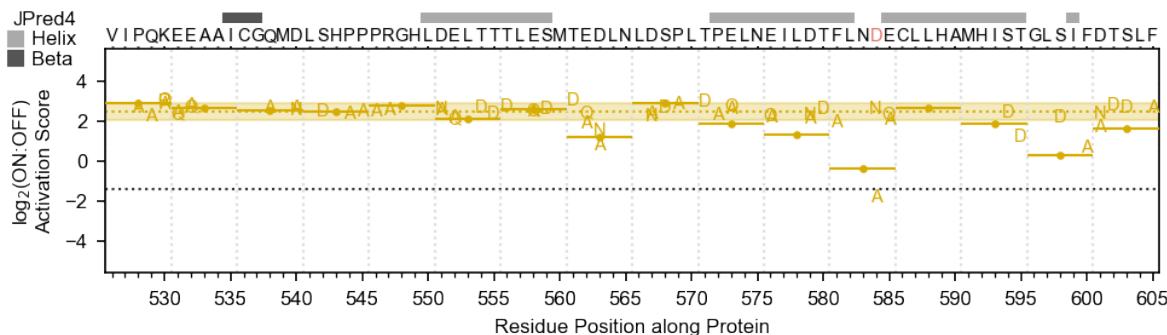
Extended activation domain from residues 511 to 605:

ETSQAVKALREMADTVIPQKEEAAICGQMDSLHPPPRGHLDLTTLESMTEDLNLDSPLTPELNEILDTLNDECLLHAMHISTGLSIFDTSLF

Max tile of activation domain from residues 526 to 605 (estimated 89.5% to 93.2% of cells activated):

VIPQKEEAAICGQMDSLHPPPRGHLDLTTLESMTEDLNLDSPLTPELNEILDTLNDECLLHAMHISTGLSIFDTSLF

## EBV RTA (P03209\_054)



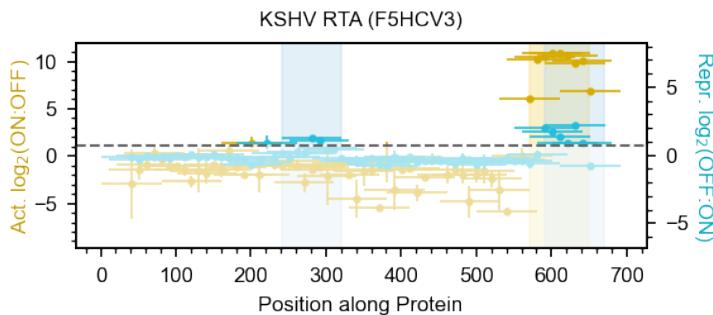
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
WW_3	544	548	PPPRG	No	-	-	
flexi_NRBOX	573	579	ELNEILD	No	-	-	
flexi_NRBOX	577	583	ILDTFLN	No	-	-	

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## KSHV RTA (F5HCV3)

Gene: ORF50 ; Protein Family: RTA



Extended repression domain from residues 241 to 330:

TGKVTLGLSYPGSGLMPESLILPILEPGLLPASMVDLSVLAKPAVILSAPALSQFVISKPHPNMPHTVSIIPFNPSGTDPAFISTWQAAS

Max tile of repression domain from residues 241 to 320 (estimated 22.4% to 26.9% of cells repressed):

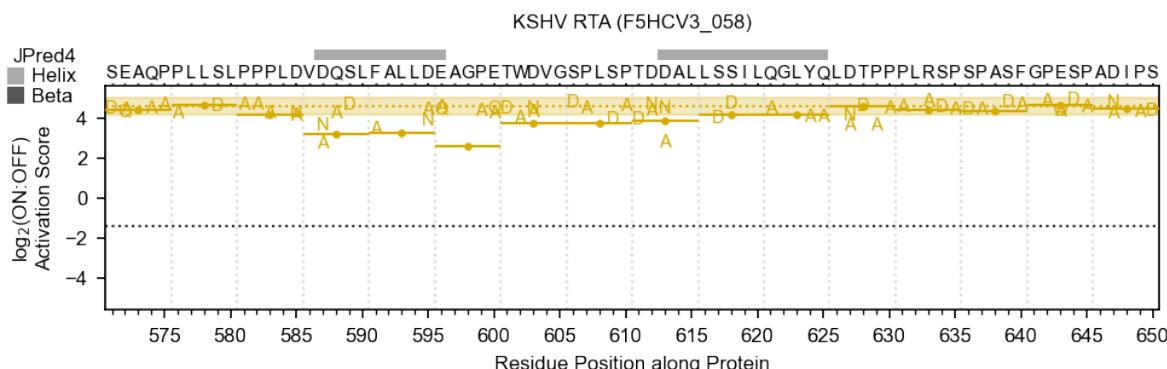
TGKVTLGLSYPGSGLMPESLILPILEPGLLPASMVDLSVLAKPAVILSAPALSQFVISKPHPNMPHTVSIIPFNPSGTD

Extended activation domain from residues 531 to 680:

ALTVPEADTPSTTTPGTSLGSITTPQDVHATDVATSEGPSEAQPPLLSLPPPLDVDQSLFALLDEAGPETWDVGSPSPTDDALLSSILQGLYQLDTPPPP  
LRSPSPASFGPESPADIPS PGSQGEYQLQPVRATSATPANEVQESGTLY

Max tile of activation domain from residues 571 to 650 (estimated 97.2% to 97.2% of cells activated):

SEAQPPLLSLPPPLDVDQSLFALLDEAGPETWDVGSPSPTDDALLSSILQGLYQLDTPPLRSPSPASFGPESPADIPS



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	582	587	PPLDVD	No	-	-	
LIG_NRBOX	589	595	SLFALLD	No	-	-	
flexi_NRBOX	615	621	LLSSILQ	No	-	-	

Extended repression domain from residues 551 to 680:

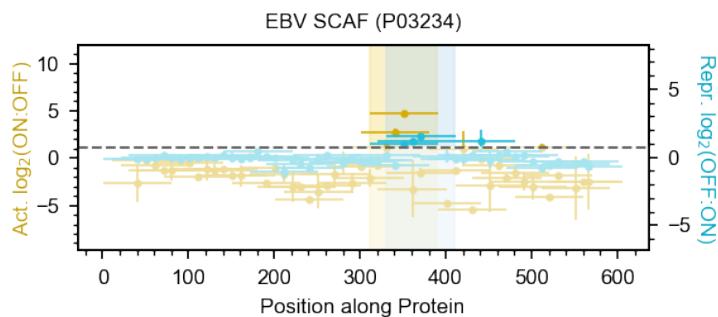
GSITTPQDVHATDVATSEGPSEAQPPLLSLPPPLDVDQSLFALLDEAGPETWDVGSPSPTDDALLSSILQGLYQLDTPPLRSPSPASFGPESPADIPS  
SGGEYQLQPVRATSATPANEVQESGTLY

Max tile of repression domain from residues 591 to 670 (estimated 45.2% to 52.2% of cells repressed):

FALLDEAGPETWDVGSPSPTDDALLSSILQGLYQLDTPPLRSPSPASFGPESPADIPS PGSQGEYQLQPVRATSATPA

## EBV SCAF (P03234)

Gene: BVRF2 ; Protein Family: SCAF



Extended activation domain from residues 291 to 390:

FMTLLQTNLNDNKPPRQTPLPYAAPLPPFSHQAIATAPSYGPGAGAVAPAGGYFTSPGGYYAGPAGGDPGAFLAMDAHTYHPHPHPPPAYFGLPGLFGPP  
PP

Max tile of activation domain from residues 311 to 390 (estimated 26.1% to 34.6% of cells activated):

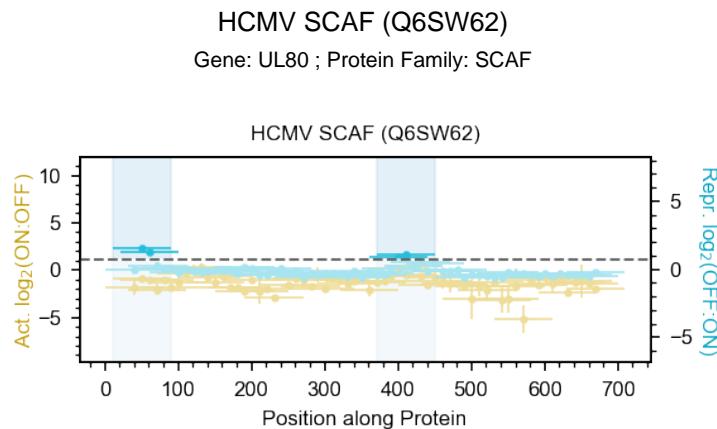
YAAPLPPFSHQAIATAPSYGPGAGAVAPAGGYFTSPGGYYAGPAGGDPGAFLAMDAHTYHPHPHPPPAYFGLPGLFGPPPPVPPYYGSHLRADYVPAP  
SR

Extended repression domain from residues 311 to 410:

YAAPLPPFSHQAIATAPSYGPGAGAVAPAGGYFTSPGGYYAGPAGGDPGAFLAMDAHTYHPHPHPPPAYFGLPGLFGPPPPVPPYYGSHLRADYVPAP  
SR

Max tile of repression domain from residues 331 to 410 (estimated 30.6% to 31.4% of cells repressed):

PGAGAVAPAGGYFTSPGGYYAGPAGGDPGAFLAMDAHTYHPHPHPPPAYFGLPGLFGPPPPVPPYYGSHLRADYVPAPSR



Extended repression domain from residues 11 to 100:

VAPVYVGGFLARYDQSPDEAELLLPRDVVEHWLHAQGQQQPSLSVALPLNINHDDTAVVGHVAAMQSVRDGLFCLGCVTS PRFLEIVRRA

Max tile of repression domain from residues 11 to 90 (estimated 27.9% to 33.6% of cells repressed):

VAPVYVGGFLARYDQSPDEAELLLPRDVVEHWLHAQGQQQPSLSVALPLNINHDDTAVVGHVAAMQSVRDGLFCLGCVTS

Extended repression domain from residues 361 to 450:

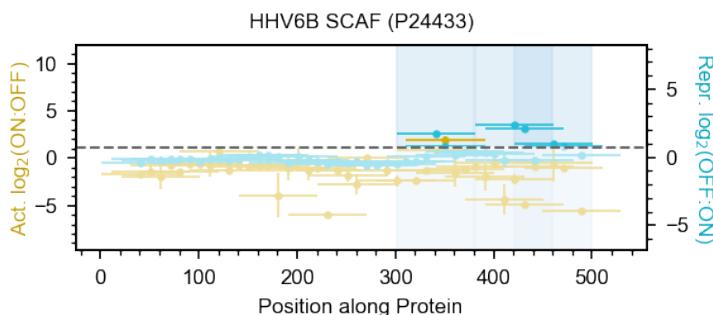
AVSSLAWPHDGVYLPKDAFFSLLGASRSAAPVMYPGAVAAPPSASPAPLPLPSYPASYGAPVVG YDQLAARHFADYVDPHYPGWGRRYEP

Max tile of repression domain from residues 371 to 450 (estimated 20.4% to 20.5% of cells repressed):

GYYLPKDAFFSLLGASRSAAPVMYPGAVAAPPSASPAPLPLPSYPASYGAPVVG YDQLAARHFADYVDPHYPGWGRRYEP

## HHV6B SCAF (P24433)

Gene: U53 ; Protein Family: SCAF



Extended repression domain from residues 301 to 390:

PFSDCVFLPKDAFFSLLNVTTGQQPKIVPPVSVHPPVTEQYQMLPYSESAAKIAEHESNRYHSPCQAMYPYWQYSPVPQYPAALHGYRQS

Max tile of repression domain from residues 301 to 380 (estimated 33.3% to 37.7% of cells repressed):

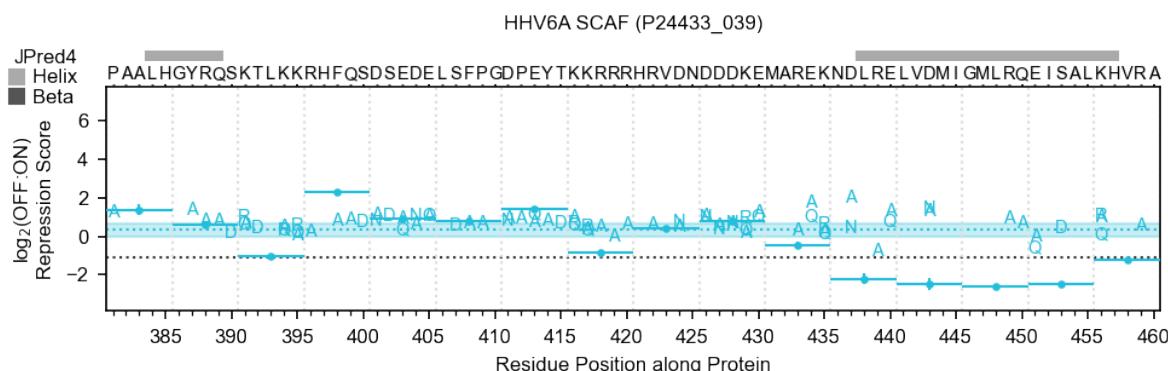
PFSDCVFLPKDAFFSLLNVTTGQQPKIVPPVSVHPPVTEQYQMLPYSESAAKIAEHESNRYHSPCQAMYPYWQYSPVPQY

Extended repression domain from residues 381 to 470:

PAALHGYRQSKTLKKRHFQSDSEDELSFGPDPEYTKRHHRVVDNDDKEMAREKNDLRELVDLIGMLRQEISALKHVRAQSPQRHIVPM

Max tile of repression domain from residues 381 to 460 (estimated 54.1% to 55.6% of cells repressed):

PAALHGYRQSKTLKKRHFQSDSEDELSFGPDPEYTKRHHRVVDNDDKEMAREKNDLRELVDLIGMLRQEISALKHVRA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_rev	424	431	DNDDDKEM	No	-	-	
flexi_NRBOX	437	443	DLRELVD	Yes	436	460	NDLRELVDLIGMLRQEISALKHVRA

Extended repression domain from residues 421 to 510:

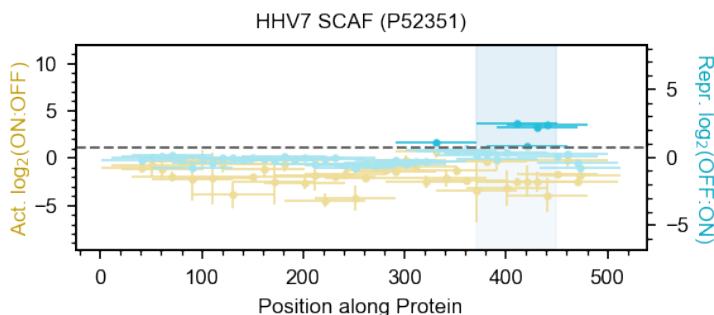
HRVDNDDDKEMAREKNDLRELVDLIGMLRQEISALKHVRAQSPQRHIVPMETLPTIEEKGAASPKPSILNASLAPETVNRSLAGQNSTD

Max tile of repression domain from residues 421 to 500 (estimated 16.9% to 22.9% of cells repressed):

HRVDNDDDKEMAREKNDLRELVDLIGMLRQEISALKHVRAQSPQRHIVPMETLPTIEEKGAASPKPSILNASLAPETVNR

## HHV7 SCAF (P52351)

Gene: U53 ; Protein Family: SCAF



Extended repression domain from residues 371 to 480:

NYKSYRGSQKRCAPTDSDDEMSFPGDPDYTTKKKRYREDDDRELTKNDIKELVDAIGMLRHEISALKYIRSQSPQRQHCTAVDTMPTIEEKNVASP  
KPSVNVNASLTP

Max tile of repression domain from residues 371 to 450 (estimated 54.8% to 57.3% of cells repressed):

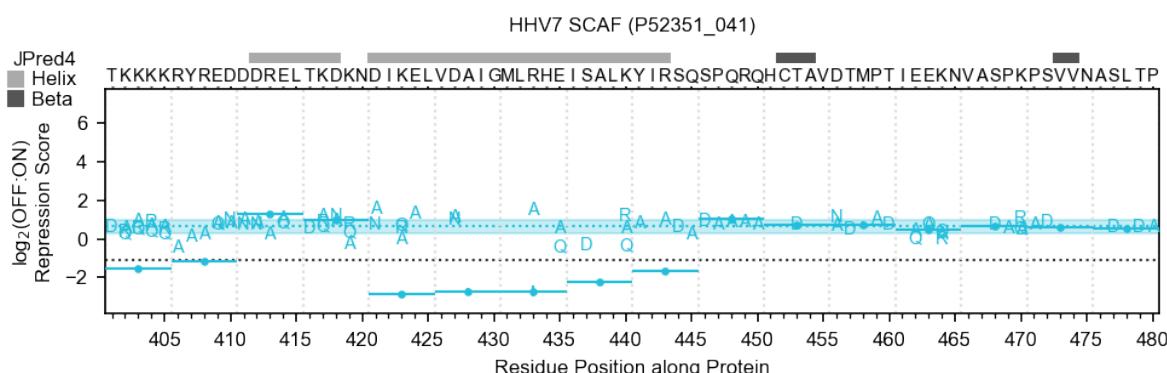
NYKSYRGSQKRCAPTDSDDEMSFPGDPDYTTKKKRYREDDDRELTKNDIKELVDAIGMLRHEISALKYIRSQSPQRQ

Extended repression domain from residues 371 to 480:

NYKSYRGSQKRCAPTDSDDEMSFPGDPDYTTKKKRYREDDDRELTKNDIKELVDAIGMLRHEISALKYIRSQSPQRQHCTAVDTMPTIEEKNVASP  
KPSVNVNASLTP

Max tile of repression domain from residues 401 to 480 (estimated 54.3% to 54.4% of cells repressed):

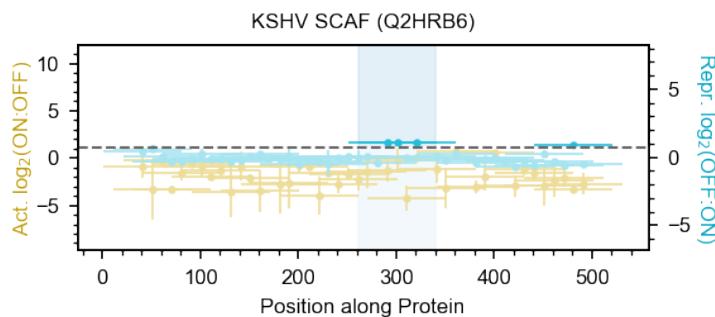
TKKKKRYREDDDRELTKNDIKELVDAIGMLRHEISALKYIRSQSPQRQHCTAVDTMPTIEEKNVASP KPSVNVNASLTP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	401	410	TKKKKRYRED
SUMO_rev	418	425	DKNDIKEL	Yes	421	445	DIKELVDAIGMLRHEISALKYIRSQ
flexi_NRBOX	421	427	DIKELVLD	Yes	421	445	DIKELVDAIGMLRHEISALKYIRSQ
SUMO_rev	456	466	DTMPTIEEKNV	No	-	-	

KSHV SCAF (Q2HRB6)

Gene: ORF17 ; Protein Family: SCAF



Extended repression domain from residues 251 to 340:

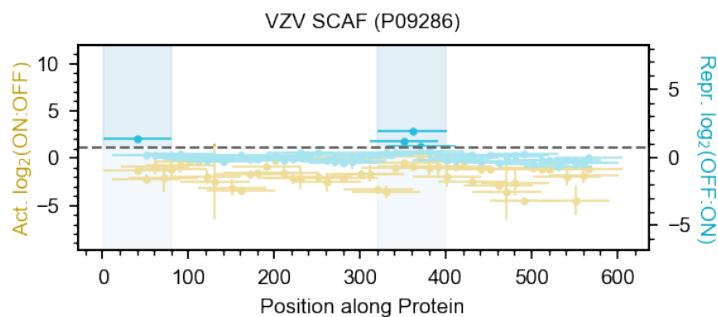
GQEDIISIPKSAFLSMLQSSIDGMKTTAAKMSHTLSPGLMGCGGQMFTDHHLPSYVSNPAPPYGYAYKNPYDPWYYSPQLPGYRTGKR

Max tile of repression domain from residues 261 to 340 (estimated 17.0% to 25.2% of cells repressed):

SAFLSMLQSSIDGMKTTAAKMSHTLSPGLMGCGGQMFTDHHLPSYVSNPAPPYGYAYKNPYDPWYYSPQLPGYRTGKR

## VZV SCAF (P09286)

Gene: ORF33 ; Protein Family: SCAF



Extended repression domain from residues 1 to 80:

MAAEADEENCEALYVAGYLALYSKDEGELNITPEIVRSALPPTSKIPINIDHRKDCVVGEVIAIIIEDIRGPFFLGIVRCP

Max tile of repression domain from residues 1 to 80 (estimated 25.0% to 30.9% of cells repressed):

MAAEADEENCEALYVAGYLALYSKDEGELNITPEIVRSALPPTSKIPINIDHRKDCVVGEVIAIIIEDIRGPFFLGIVRCP

Extended repression domain from residues 311 to 410:

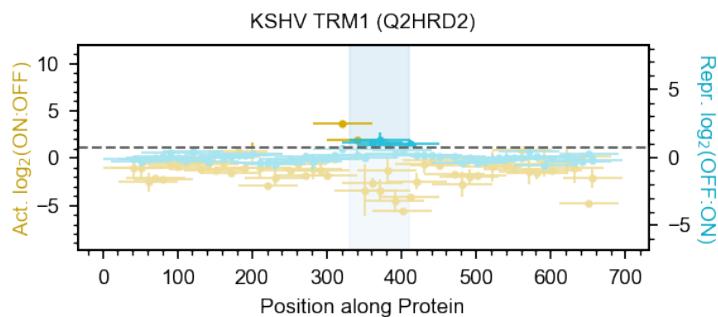
ASNISPQPPSGVPTGGEFVLIPTAYYSQLLTGQTKNPQVSIGAPNNGQYIVGPYGSPPAFPPNTGGYGCPPGHFGGPYGFPGYPPNRLEMQMSAF  
MN

Max tile of repression domain from residues 321 to 400 (estimated 39.9% to 43.0% of cells repressed):

GVPTGGEFVLIPTAYYSQLLTGQTKNPQVSIGAPNNGQYIVGPYGSPPAFPPNTGGYGCPPGHFGGPYGFPGYPPNR

KSHV TRM1 (Q2HRD2)

Gene: ORF7 ; Protein Family: TRM1



Extended repression domain from residues 321 to 420:

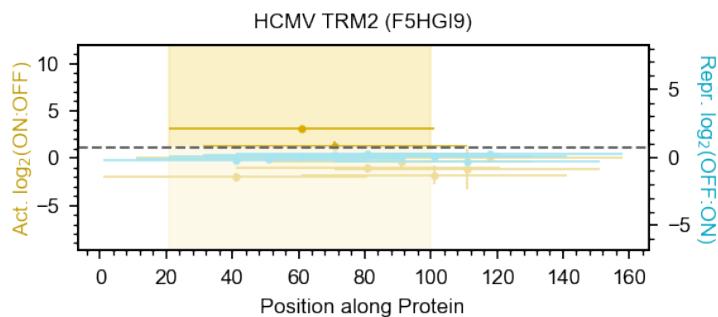
GCLGERGTPKHFFDCFRPDSLETLFCGGLFSSVEDTIESLQKDSSAFYQQVNYTTALQKQNEFYVRLSKLLAAGQLNLGKCSTESCPSEARRQLVGGDK

Max tile of repression domain from residues 331 to 410 (estimated 15.0% to 37.8% of cells repressed):

HFFDCFRPDSLETLFCGGLFSSVEDTIESLQKDSSAFYQQVNYTTALQKQNEFYVRLSKLLAAGQLNLGKCSTESCPSE

HCMV TRM2 (F5HGI9)

Gene: UL51 ; Protein Family: TRM2



Extended activation domain from residues 21 to 110:

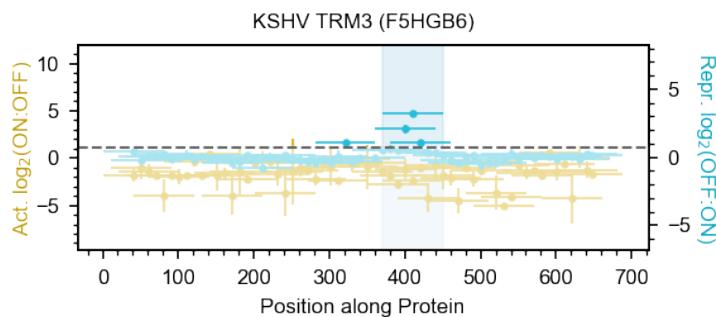
DVQDDVDSPVPTRPLVIDEDAEPAAAGTSGGLEGGGGDDEDGEDGHALPDLDLQLQFEPMLPRVYDLLLPSLDARLNFnAGQKYAAFL

Max tile of activation domain from residues 21 to 100 (estimated 8.5% to 9.9% of cells activated):

DVQDDVDSPVPTRPLVIDEDAEPAAAGTSGGLEGGGGDDEDGEDGHALPDLDLQLQFEPMLPRVYDLLLPSLDARLNFn

## KSHV TRM3 (F5HGB6)

Gene: ORF29 ; Protein Family: TRM3

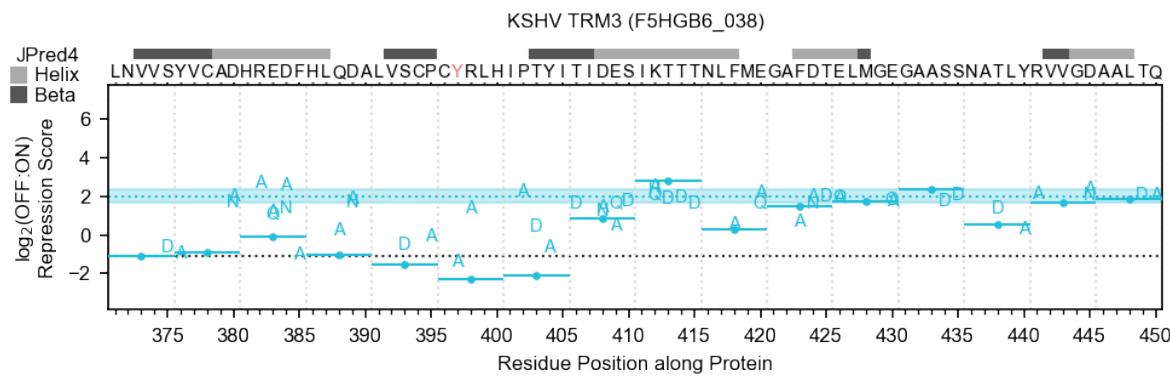


Extended repression domain from residues 361 to 460:

LNLRNAQEKMNVSVYVCADHREDFHLQDALVSCPCYRLHIPTYITIDESIKTTTNLFMEGAFDTELNGEGAASSNATLYRVVGDAALTQFDMCRVDTTA

Max tile of repression domain from residues 371 to 450 (estimated 73.2% to 77.6% of cells repressed):

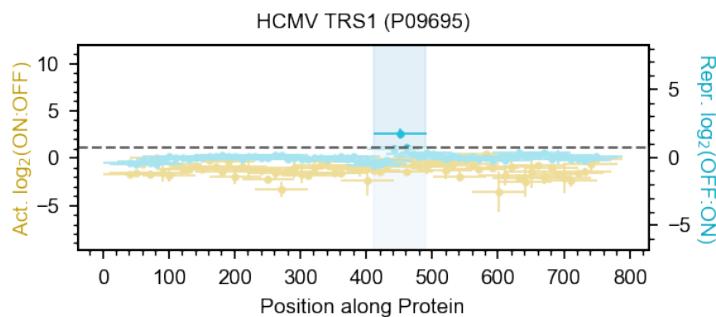
LNVVSYVCADHREDFHLQDALVSCPCYRLHIPTYITIDESIKTTTNLFMEGAFDTELNGEGAASSNATLYRVVGDAALTQ



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	372	378	NVVSYVC	Yes	371	375	LNVS
	-	-		No	391	405	LVSCPCYRLHIPTYI
flexi_NRBOX	438	444	TLYRVVG	No	-	-	

HCMV TRS1 (P09695)

Gene: TRS1 ; Protein Family: TRS1



Extended repression domain from residues 411 to 500:

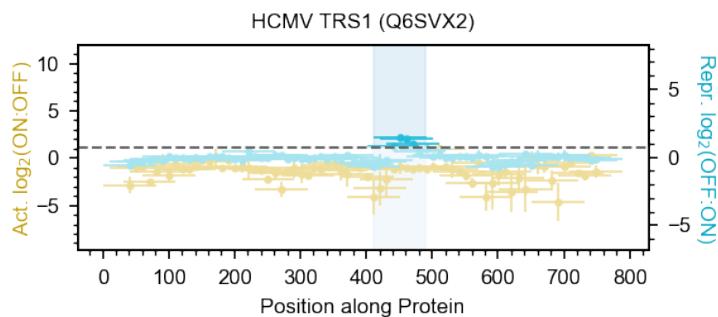
AAGGGAIVPNADAHAVVGADAAAAAAPTVMGSTAMAGPAASGTVPRAMLVLLDELGAVFGYCPLDGHVYPLAAELSHFLRAGVLGAL

Max tile of repression domain from residues 411 to 490 (estimated 27.2% to 46.4% of cells repressed):

AAGGGAIVPNADAHAVVGADAAAAAAPTVMGSTAMAGPAASGTVPRAMLVLLDELGAVFGYCPLDGHVYPLAAELSH

HCMV TRS1 (Q6SVX2)

Gene: TRS1 ; Protein Family: TRS1



Extended repression domain from residues 401 to 510:

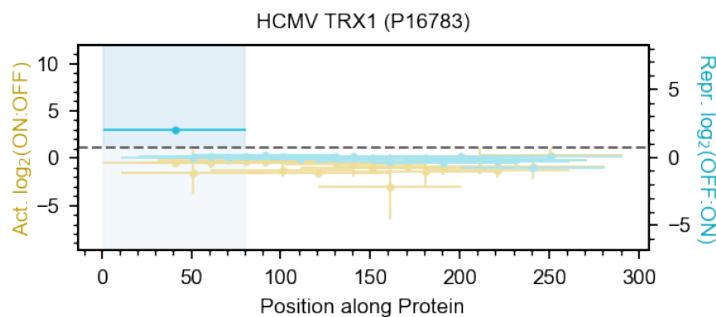
PPQPYGGAGGSAICVPNADAHAVVGADATAAAAAAAAAPTVMVGPTAMAGPAASGTVPRAMLVVVLDELGAVFGYCPLDGHVYPLAAELSHFLRAGVL  
GALALGRESAPA

Max tile of repression domain from residues 411 to 490 (estimated 27.4% to 31.6% of cells repressed):

SAICVPNADAHAVVGADATAAAAAAAAAPTVMVGPTAMAGPAASGTVPRAMLVVVLDELGAVFGYCPLDGHVYPLAAELS

HCMV TRX1 (P16783)

Gene: UL46 ; Protein Family: TRX1



Extended repression domain from residues 1 to 80:

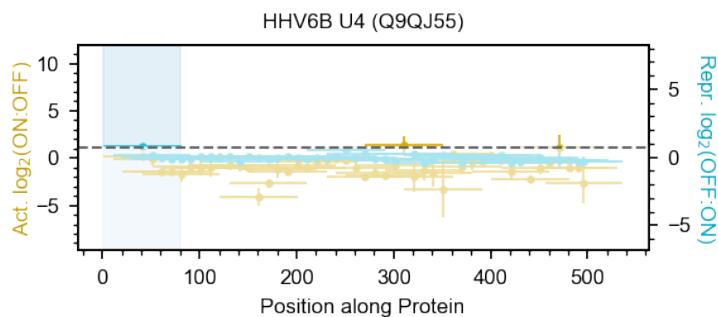
MDARAVAKRPRDPADEDNELVTALKAKREVNTISVRYLYHADHQALTARFFVPEGLVEFEAQPGALLIRMETGCDSPRHL

Max tile of repression domain from residues 1 to 80 (estimated 42.6% to 43.7% of cells repressed):

MDARAVAKRPRDPADEDNELVTALKAKREVNTISVRYLYHADHQALTARFFVPEGLVEFEAQPGALLIRMETGCDSPRHL

HHV6B U4 (Q9QJ55)

Gene: U4 ; Protein Family: U4



Extended repression domain from residues 1 to 80:

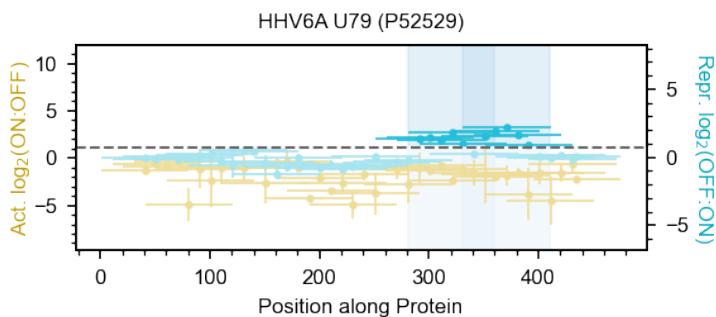
MELLDHD~~IYKG~~PVRERV~~TY~~TIPNHPYLSLT~~V~~HHSRELDVDLKDITEEMIIDSGTLTAEDLFMTRGLRFCDDSVLWAALAE

Max tile of repression domain from residues 1 to 80 (estimated 13.6% to 17.0% of cells repressed):

MELLDHD~~IYKG~~PVRERV~~TY~~TIPNHPYLSLT~~V~~HHSRELDVDLKDITEEMIIDSGTLTAEDLFMTRGLRFCDDSVLWAALAE

## HHV6A U79 (P52529)

Gene: U79/U80 ; Protein Family: U79



Extended repression domain from residues 251 to 370:

ALPPCISIDNHEDQQHQDELKRAYAQGTNREGLSNEDNYGNFRLNKSLEQLRAKLVASSGDIVERSLLKLKECLDNVKDNLIKNECADVTGPSKCLSHTK  
HIEPKKKQIVFSDCVRPVPVC

Max tile of repression domain from residues 281 to 360 (estimated 36.5% to 43.5% of cells repressed):

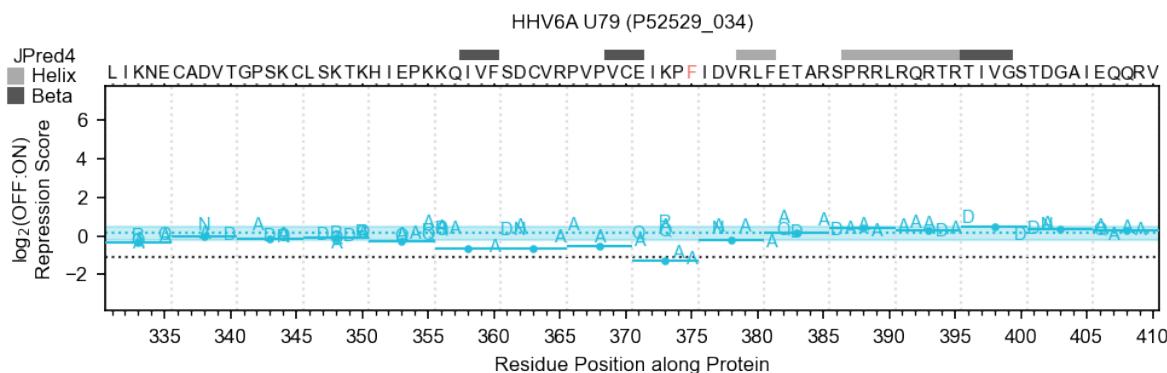
EGLSNEDNYGNFRLNKSLEQLRAKLVASSGDIVERSLLKLKECLDNVKDNLIKNECADVTGPSKCLSHTKHIEPKKKQIVF

Extended repression domain from residues 311 to 430:

DIVERSLLKLKECLDNVKDNLIKNECADVTGPSKCLSHTKHIEPKKKQIVFSDCVRPVPVC EIKPFIDVRLFETARSPRRLQRTRTIVGSTDGAIEQQRVISG  
QNRGRARGRGRGRAPR

Max tile of repression domain from residues 331 to 410 (estimated 46.7% to 52.4% of cells repressed):

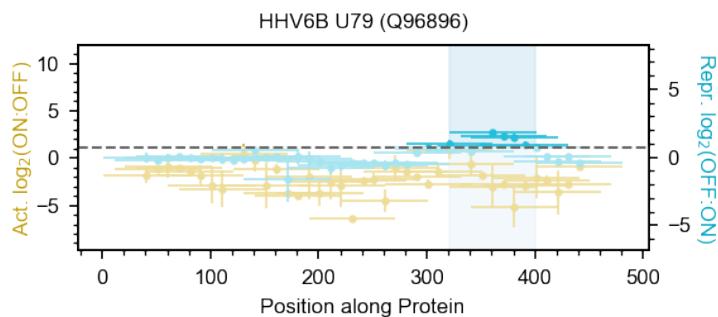
LIKNECADVTGPSKCLSHTKHIEPKKKQIVFSDCVRPVPVC EIKPFIDVRLFETARSPRRLQRTRTIVGSTDGAIEQQRV



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	332	335	IKNE	No	-	-	
	-	-		No	371	375	EIKPF

HHV6B U79 (Q96896)

Gene: U79/U80 ; Protein Family: U79



Extended repression domain from residues 311 to 430:

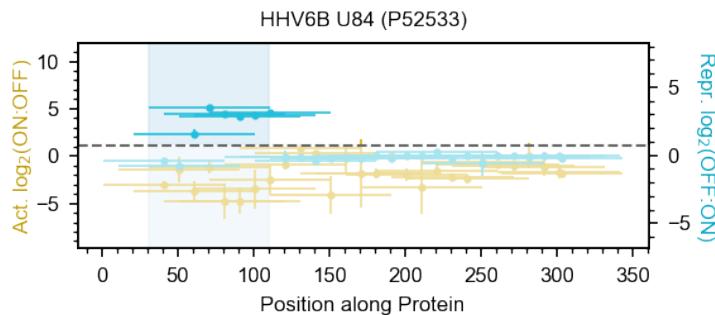
GEVVERSLSKLKERLDYVKDNLIKNVLECADVTVP SKCLS KTKHIEQQKQIVFSDCVRSVPVCEIKPFIDMRVFETETTQNARRVRQRTRTVGSTDGAIG  
QQRVISGQNRGRARGRG

Max tile of repression domain from residues 321 to 400 (estimated 36.6% to 39.5% of cells repressed):

LKERLDYVKDNLIKNVLECADVTVP SKCLS KTKHIEQQKQIVFSDCVRSVPVCEIKPFIDMRVFETETTQNARRVRQRTR

## HHV6B U84 (P52533)

Gene: U84 ; Protein Family: U84

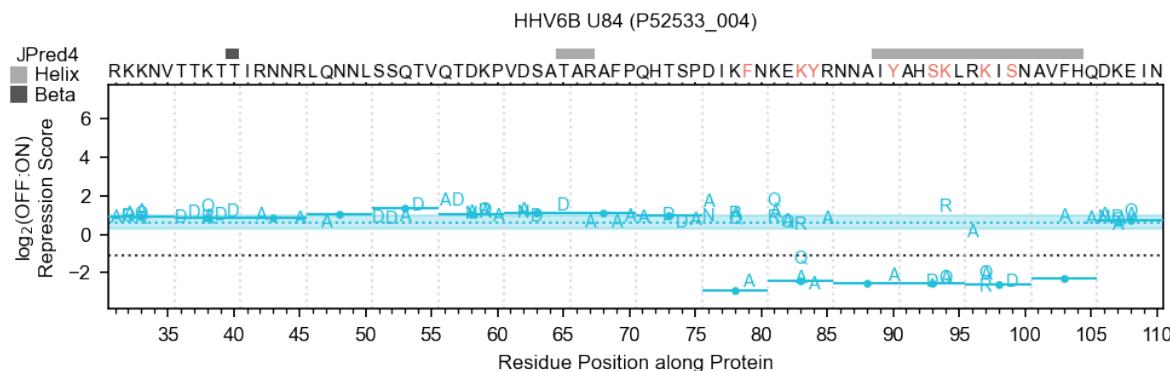


Extended repression domain from residues 21 to 150:

TRKTTKPSTERKKNVTKTIRNNRLQNNLSSQTVQTDKPVDSATARAFPQHTSPDIKFNKEKYRNNAIYAHSKLRKISNAVFHQDKEINRFSAFDKPLA  
DLSFNMPVKTSTTQKKEIVKSTECQRQDP

Max tile of repression domain from residues 31 to 110 (estimated 77.5% to 84.1% of cells repressed):

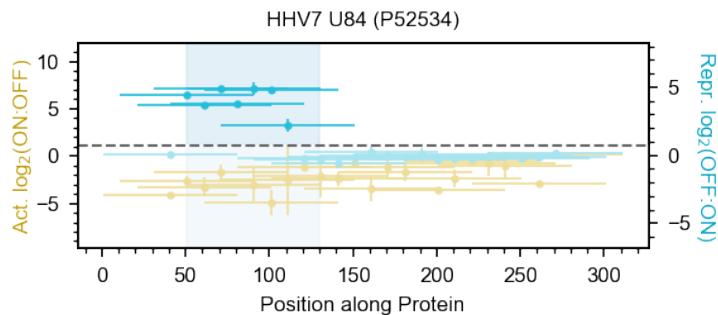
RKKNVTTKTTIRNNRLQNNLSSQTVQTDKPVDSATARAFPQHTSPDIKFNKEKYRNNAIYAHSKLRKISNAVFHQDKEIN



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_rev	74	79	SPDIKF	Yes	76	105	DIKFNKEKYRNNAIYAHSKLRK ISNAVFHQ

## HHV7 U84 (P52534)

Gene: U84 ; Protein Family: U84

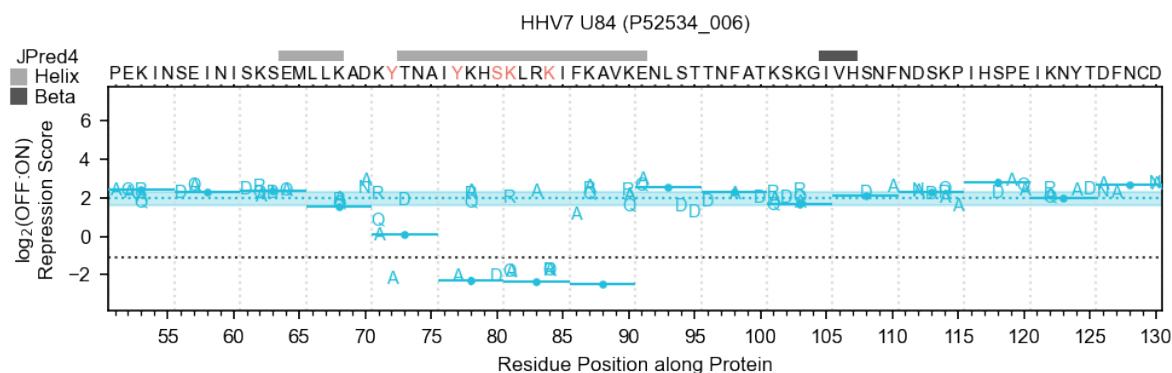


Extended repression domain from residues 11 to 150:

KAKGKLTSKSCMCTKANARYTCNCFSKTLPFNEKAIKCTIPEKINSEINISKSEMLLKADKYTNAYKHSKLRKIFKAVKENLSTTNFATSKKGIVHSNFNDSK  
PIHSPEIKNYTDFNCDFMHPCGLCSPKNFLSEVYKL

Max tile of repression domain from residues 51 to 130 (estimated 92.6% to 97.9% of cells repressed):

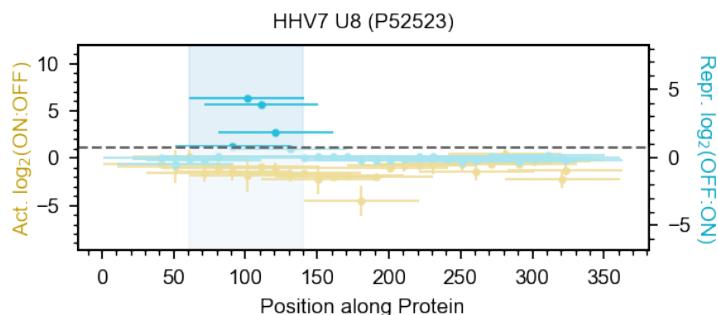
PEKINSEINISKSEMLLKADKYTNAYKHSKLRKIFKAVKENLSTTNFATSKKGIVHSNFNDSPPIHSPEIKNYTDFNCD



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	81	87	KLRKIFK	Yes	76	90	IYKHSKLRKIFKAVK
SUMO_rev	108	116	SNFNDNSKPI	No	-	-	

## HHV7 U8 (P52523)

Gene: U8 ; Protein Family: U8

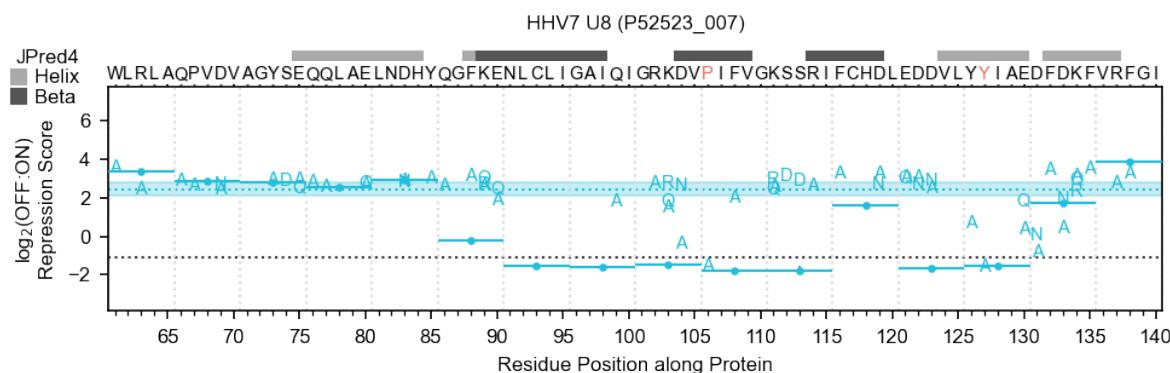


Extended repression domain from residues 51 to 160:

CLSLIWPKNLWLRLAQPVDVAGYSEQQLAELNDHYQGFKENLCLIGAIQIGRKDVPIFVGKSSRIFCHDLEDDVLYYIAEDFDKFVRFGILGTVITCSEPVY  
TRFYDGD

Max tile of repression domain from residues 61 to 140 (estimated 91.1% to 91.4% of cells repressed):

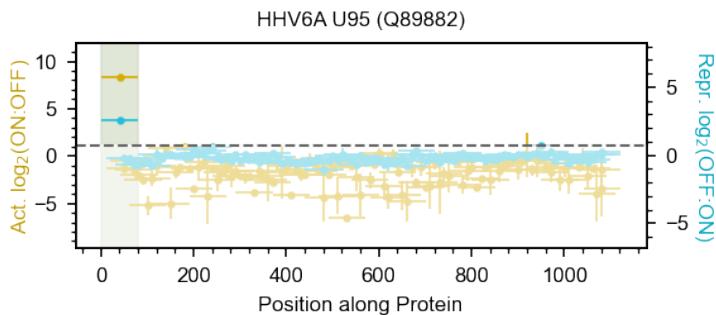
WLRLAQPVDVAGYSEQQLAELNDHYQGFKENLCLIGAIQIGRKDVPIFVGKSSRIFCHDLEDDVLYYIAEDFDKFVRFGI



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	91	115	NLCLIGAIQIGRKDVPIFVGKSSRI
flexi_NRBOX	123	129	DVLYYIA	Yes	121	130	EDDVLYYIAE
flexi_NRBOX	131	137	DFDKFVR	No	-	-	

## HHV6A U95 (Q89882)

Gene: U95 ; Protein Family: U95

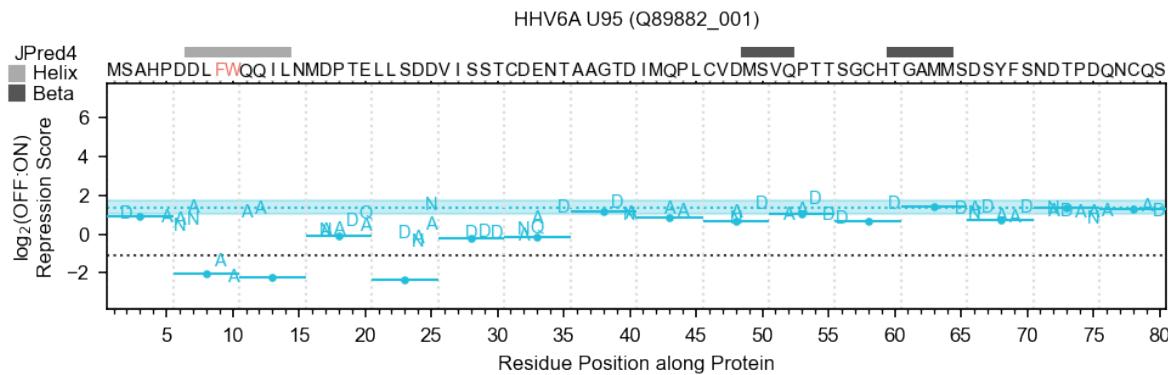


Extended repression domain from residues 1 to 80:

MSAHPDDLFWQQILNMDPTELLSDDVISSTCDENTAAGTDIMQPLCVDMMSVQPTTSGCHTGAMMSDSYFSNDTPDQNCQS

Max tile of repression domain from residues 1 to 80 (estimated 58.2% to 60.7% of cells repressed):

MSAHPDDLFWQQILNMDPTELLSDDVISSTCDENTAAGTDIMQPLCVDMMSVQPTTSGCHTGAMMSDSYFSNDTPDQNCQS



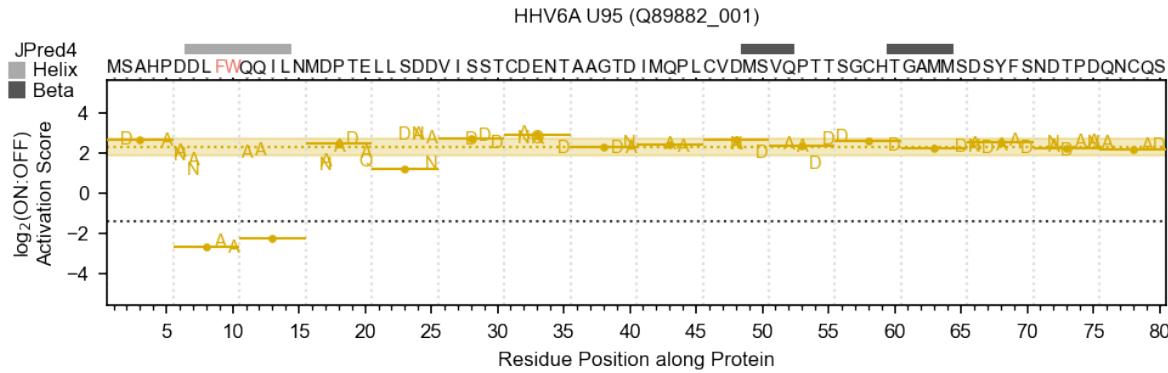
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
CtBP_expanded	5	9	PDDLF	Yes	6	15	DDLFWQQILN
flexi_NRBOX	9	15	FWQQILN	Yes	6	15	DDLFWQQILN
CtBP_expanded	18	22	PTELL	Yes	21	25	LLSDD

Extended activation domain from residues 1 to 80:

MSAHPDDLFWQQILNMDPTELLSDDVISSTCDENTAAGTDIMQPLCVDMMSVQPTTSGCHTGAMMSDSYFSNDTPDQNCQS

Max tile of activation domain from residues 1 to 80 (estimated 87.9% to 91.4% of cells activated):

MSAHPDDLFWQQILNMDPTELLSDDVISSTCDENTAAGTDIMQPLCVDMMSVQPTTSGCHTGAMMSDSYFSNDTPDQNCQS



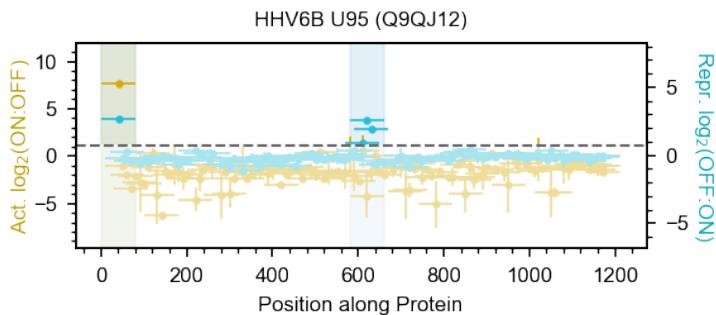
**Herpesvirus Tiling and Perturbation Screen Data from Ludwig, C.H. et al. 2023**

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
CtBP_expanded	5	9	PDDLF	Yes	6	15	DDLFWQQILN
flexi_NRBOX	9	15	FWQQILN	Yes	6	15	DDLFWQQILN
CtBP_expanded	18	22	PTELL	No	-	-	

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## HHV6B U95 (Q9QJ12)

Gene: U95 ; Protein Family: U95

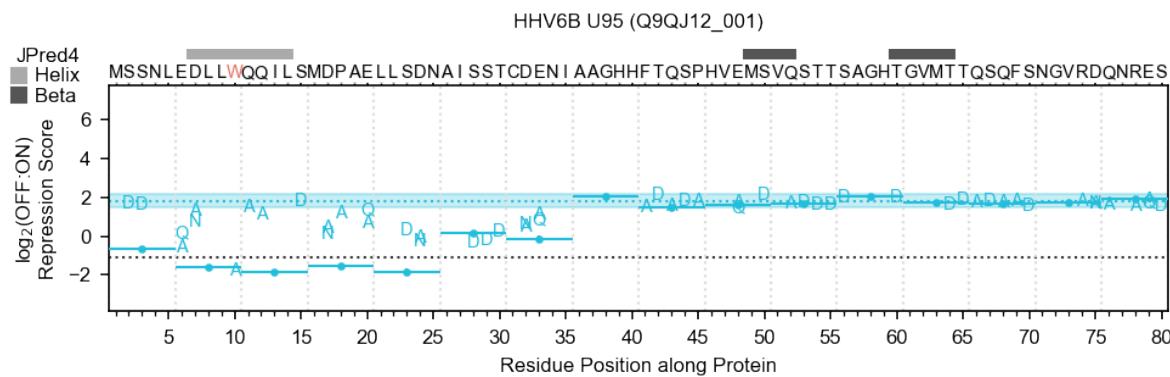


Extended repression domain from residues 1 to 80:

MSSNLEDLLWQQILSMDPAELLSDNAISSTCDENIAAGHHFTQSPHVEMSVQSTTSAGHTGVMTTQSQFSNGVRDQNRES

Max tile of repression domain from residues 1 to 80 (estimated 58.9% to 62.9% of cells repressed):

MSSNLEDLLWQQILSMDPAELLSDNAISSTCDENIAAGHHFTQSPHVEMSVQSTTSAGHTGVMTTQSQFSNGVRDQNRES



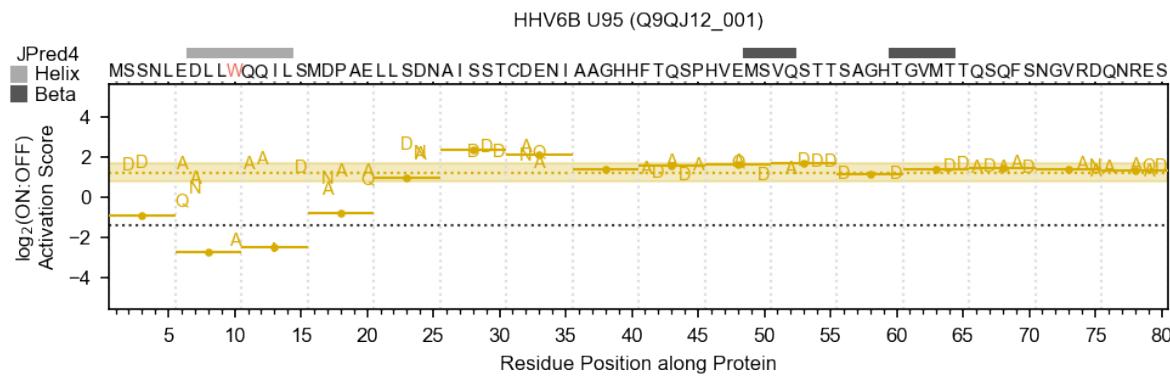
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	4	10	NLEDLLW	Yes	6	25	EDLLWQQILSMDPAELLSDN
CtBP_expanded	18	22	PAELL	Yes	6	25	EDLLWQQILSMDPAELLSDN
flexi_NRBOX	9	15	LWQQILS	Yes	6	25	EDLLWQQILSMDPAELLSDN

Extended activation domain from residues 1 to 80:

MSSNLEDLLWQQILSMDPAELLSDNAISSTCDENIAAGHHFTQSPHVEMSVQSTTSAGHTGVMTTQSQFSNGVRDQNRES

Max tile of activation domain from residues 1 to 80 (estimated 83.1% to 84.0% of cells activated):

MSSNLEDLLWQQILSMDPAELLSDNAISSTCDENIAAGHHFTQSPHVEMSVQSTTSAGHTGVMTTQSQFSNGVRDQNRES



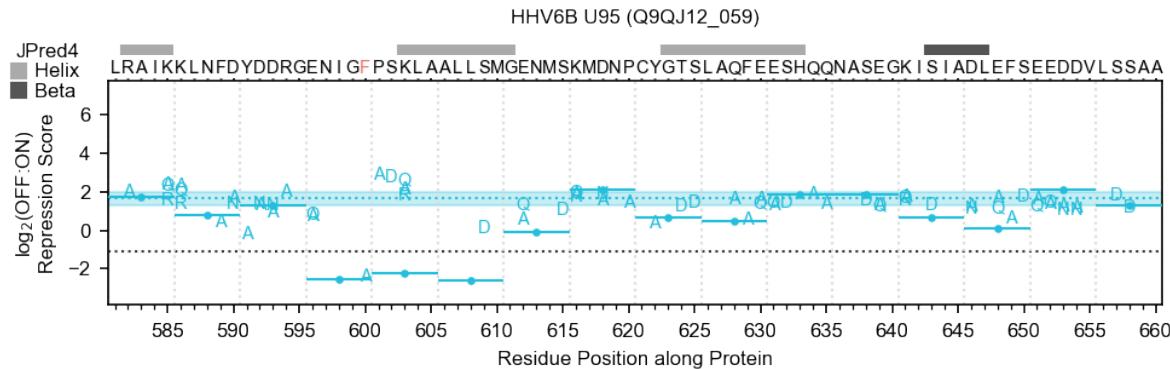
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	4	10	NLEDLLW	Yes	6	15	EDLLWQQILS
flexi_NRBOX	9	15	LWQQILS	Yes	6	15	EDLLWQQILS
CtBP_expanded	18	22	PAELL	No	-	-	

Extended repression domain from residues 571 to 670:

NKDVCKPTPSLRAIKKLNFYDDRGENIGFPSKLAALLSMGENMSKMDNPCYGTSLAQFEESHQQNASEGKISIADLEFSEEDDVLSAAASVSCNDNCVM

Max tile of repression domain from residues 581 to 660 (estimated 55.7% to 61.2% of cells repressed):

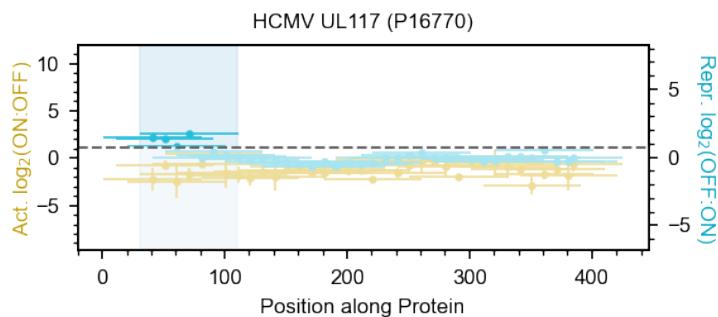
LRAIKKLNFYDDRGENIGFPSKLAALLSMGENMSKMDNPCYGTSLAQFEESHQQNASEGKISIADLEFSEEDDVLSAA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	603	609	KLAALLS	Yes	596	610	ENIGFPSKLAALLSM
SUMO_rev	638	643	SEGKIS	No	-	-	

HCMV UL117 (P16770)

Gene: UL117 ; Protein Family: UL117



Extended repression domain from residues 1 to 110:

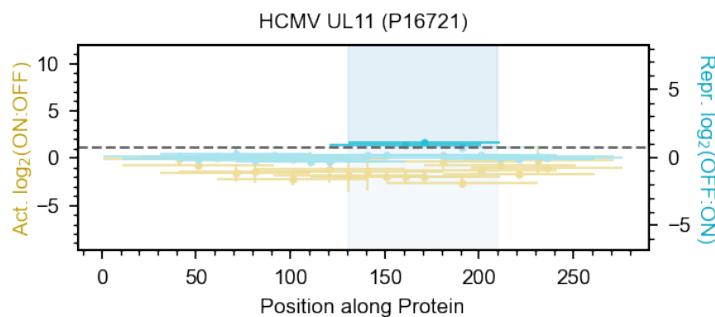
MVMFSQDHVQIVYGSTRICKSLAPANKRKTHRTIVVAPRRGFLRIPPDGQDVNHVKIVPTTSSSLAPPRDDERRPTPPLRPPLTVYPYGTSLIRRSARDAK  
LRSKLIVFH

Max tile of repression domain from residues 31 to 110 (estimated 34.3% to 38.0% of cells repressed):

HRTIVVAPRRGFLRIPPDGQDVNHVKIVPTTSSSLAPPRDDERRPTPPLRPPLTVYPYGTSLIRRSARDAKLRSKLIVFH

HCMV UL11 (P16721)

Gene: UL11 ; Protein Family: UL11



Extended repression domain from residues 121 to 210:

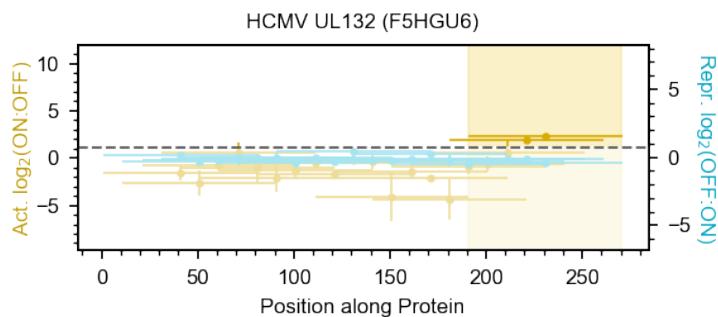
WHNHGNKWTLDTCYYVYVTQNGTLPTTTKKPTTTRTTTTTKKTTTTSTTTTTKKTTTSTTHHRHSNPKESTTPKTHVELHVGL

Max tile of repression domain from residues 131 to 210 (estimated 19.3% to 23.8% of cells repressed):

DTCYYVYVTQNGTLPTTTKKPTTTRTTTTTKKTTTSTTTTTKKTTTSTTHHRHSNPKESTTPKTHVELHVGL

HCMV UL132 (F5HGU6)

Gene: UL132 ; Protein Family: UL132



Extended activation domain from residues 181 to 270:

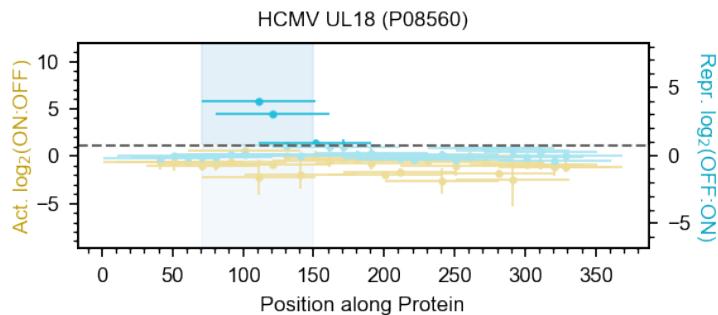
KHDPEVYFRKDGNLDTSFVNPNYGRGSPLTIESHLSNEEDPIRYYVSYDELTASEMEEPSNSTSWQIPKLMKVAMQPVSLRDPEYD

Max tile of activation domain from residues 191 to 270 (estimated 4.7% to 6.0% of cells activated):

RKDGNLDTSFVNPNYGRGSPLTIESHLSNEEDPIRYYVSYDELTASEMEEPSNSTSWQIPKLMKVAMQPVSLRDPEYD

## HCMV UL18 (P08560)

Gene: UL18 ; Protein Family: UL18

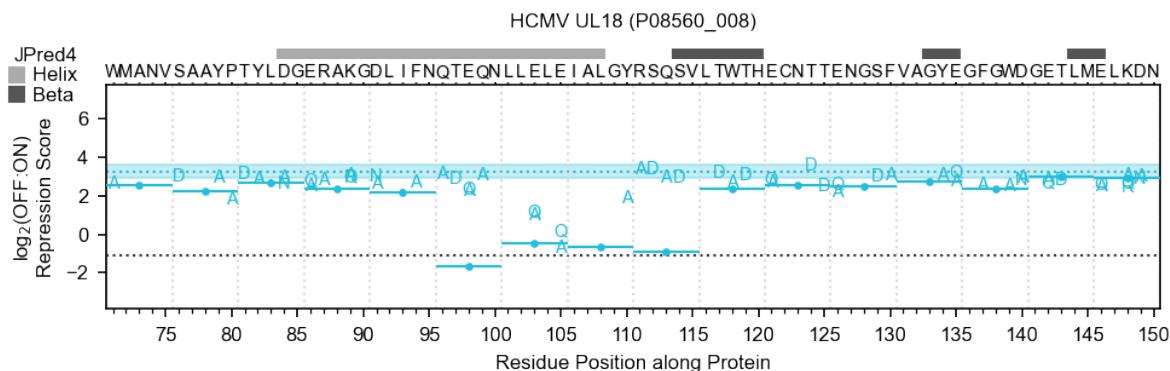


Extended repression domain from residues 71 to 170:

WMANVSAAYPTYLDGERAKGDLIFNQTEQNLLLEI ALGYRSQSVLTWTHECNTTENGSFVAGYEGFGWDGETLMEKDNLTLWTGPNEYISWLKQNK  
TY

Max tile of repression domain from residues 71 to 150 (estimated 87.5% to 88.6% of cells repressed):

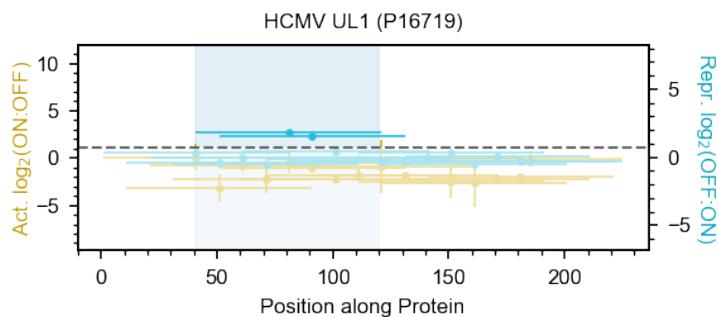
WMANVSAAYPTYLDGERAKGDLIFNQTEQNLLLEI ALGYRSQSVLTWTHECNTTENGSFVAGYEGFGWDGETLMEKD



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	100	105	NLLELE	Yes	96	100	QTEQN

HCMV UL1 (P16719)

Gene: UL1 ; Protein Family: UL1



Extended repression domain from residues 41 to 130:

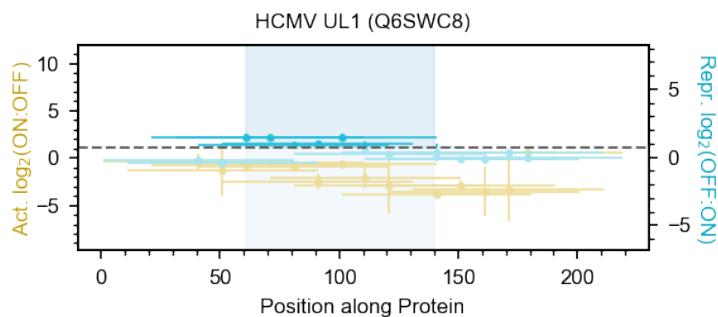
RLFLQSQHVEAPITVTQGDTVYLDASNNPCNYSSFWYHGNCELCGWNGYLRNVTHYYTNTSCSPQFMCINETKGLQLYNVTLNDSGAYTE

Max tile of repression domain from residues 41 to 120 (estimated 39.6% to 39.8% of cells repressed):

RLFLQSQHVEAPITVTQGDTVYLDASNNPCNYSSFWYHGNCELCGWNGYLRNVTHYYTNTSCSPQFMCINETKGLQLYNV

HCMV UL1 (Q6SWC8)

Gene: UL1 ; Protein Family: UL1



Extended repression domain from residues 21 to 150:

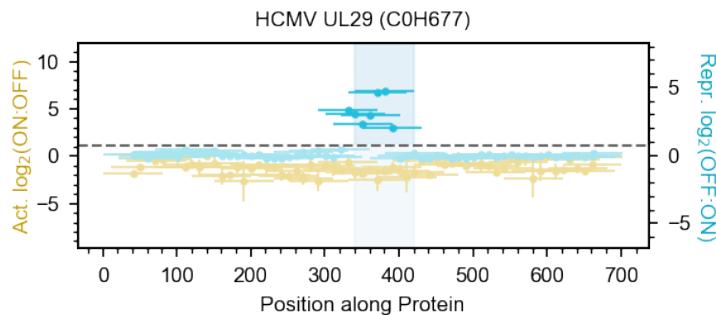
SSILVQAIPHKKQKTSYQQLLLQSEHVQIPIVAEGDTICFNVSDNPCNFSSYWNNCELCGWTPFYSEYAGYSENKSCHPRFTCLHDTKGLKLHNVTND  
DSGIYTRNVYYCDIPCNISDDHKHNVEDFD

Max tile of repression domain from residues 61 to 140 (estimated 24.5% to 36.3% of cells repressed):

NVSDNPCNFSSYWNNCELCGWTPFYSEYAGYSENKSCHPRFTCLHDTKGLKLHNVTND  
SGIYTRNVYYCDIPCNISD

## HCMV UL29 (C0H677)

Gene: UL29 ; Protein Family: UL29

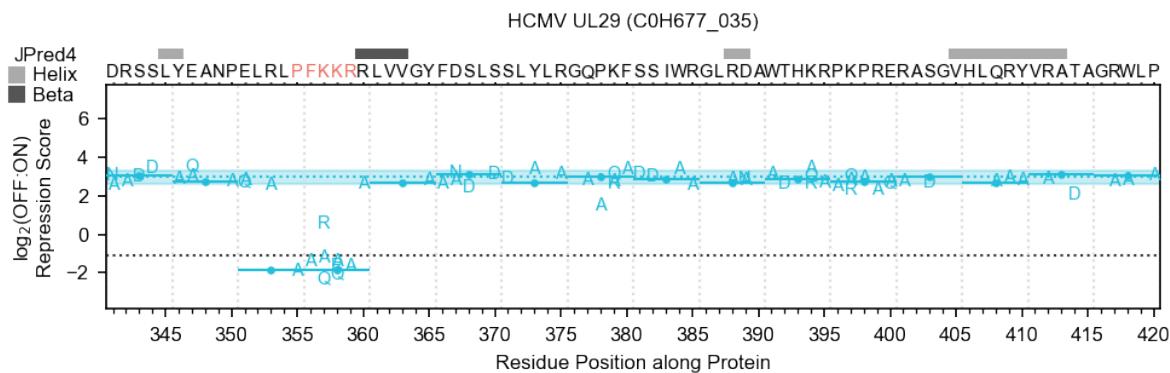


Extended repression domain from residues 291 to 430:

RILCGDTGTVYAAALVGQDKLVLRLARDLRGFVRVGLALLIDDFRYESIGPVDRSSLYEANPELRLPFKKRRLVVGYFDSLSSLYLRGQPKFSSIWRGLRDA  
WTHKRPKPRERASGVHLQRYVRATAGRWLPLCWPPPLHGIM

Max tile of repression domain from residues 341 to 420 (estimated 94.1% to 95.2% of cells repressed):

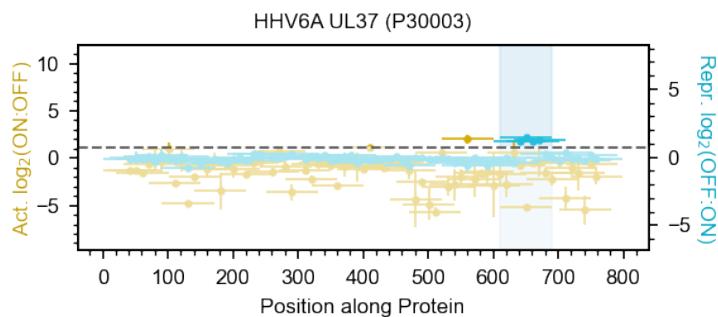
DRSSLYEANPELRLPFKKRRLVVGYFDSLSSLYLRGQPKFSSIWRGLRDAWTHKRPKPRERASGVHLQRYVRATAGRWLP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
NCoR_SMRT_1	355	359	PFKKR	Yes	351	360	ELRLPFFKKRR
flexi_NRBOX	361	367	LVVGYFD	No	-	-	
flexi_NRBOX	406	412	HLQRYVR	No	-	-	

HHV6A UL37 (P30003)

Gene: U30 ; Protein Family: UL37



Extended repression domain from residues 601 to 710:

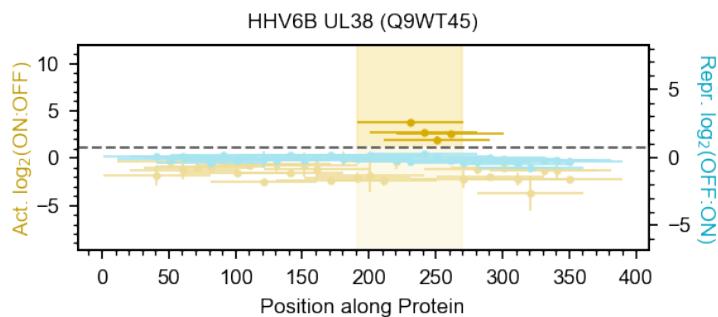
EKSLQTIQISETTLTGMRLNIITSVSSSKELLTNEALQKFIDTVQRISQHVNETYQSISMNLEKCKTSNDILIESLKKIIYIVDVLSSNAILNTSLASRCLEAANLA  
VSN

Max tile of repression domain from residues 611 to 690 (estimated 25.0% to 33.6% of cells repressed):

ETTLTGMLRNIITSVSSSKELLTNEALQKFIDTVQRISQHVNETYQSISMNLEKCKTSNDILIESLKKIIYIVDVLSSNA

HHV6B UL38 (Q9WT45)

Gene: U19 ; Protein Family: UL38



Extended activation domain from residues 191 to 300:

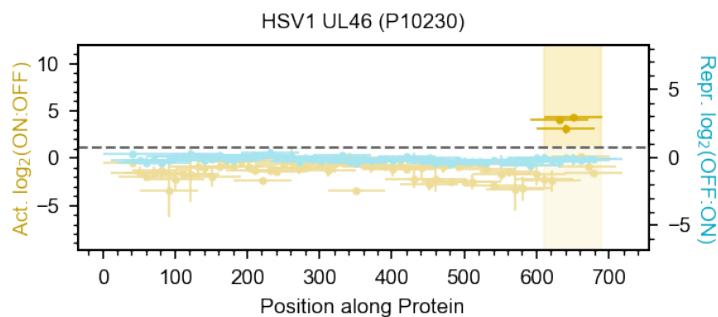
DARASMRPIQSDSFGAKGPFCWPTEELLQPSAKKDVGTVCMALSCQEDNSARHCTIYGLTKTPGIKIMLSRHTQTDRSEAMCDAATQTEDVVDSSE  
TLFLGGNLVHQs

Max tile of activation domain from residues 191 to 270 (estimated 12.3% to 17.9% of cells activated):

DARASMRPIQSDSFGAKGPFCWPTEELLQPSAKKDVGTVCMALSCQEDNSARHCTIYGLTKTPGIKIMLSRHTQTDRSE

HSV1 UL46 (P10230)

Gene: UL46 ; Protein Family: UL46



Extended activation domain from residues 591 to 690:

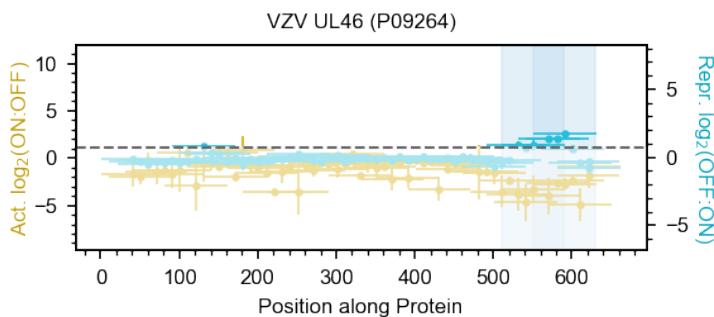
RKATHAASARERHAPYEDDESIYETVSEDGGRVYEEIPWMRVYENVCVNTANAAPASPYIEAENPLYDWGGSALFSPPGRTGPPPLSPSPVLRHR  
AN

Max tile of activation domain from residues 611 to 690 (estimated 20.7% to 23.2% of cells activated):

SIYETVSEDGGRVYEEIPWMRVYENVCVNTANAAPASPYIEAENPLYDWGGSALFSPPGRTGPPPLSPSPVLRHRAN

## VZV UL46 (P09264)

Gene: ORF12 ; Protein Family: UL46



Extended repression domain from residues 491 to 590:

LSDDVNASSHVINTEAPLNSIAPDTNRQRTSRVLVRPDTGLDVTVRKNHCLDIGTDGSPVDPTYPDHYTRIKAEYEGPVRDESNTMFDQRSDLRHIETQ

Max tile of repression domain from residues 511 to 590 (estimated 12.0% to 25.5% of cells repressed):

IAPDTNRQRTSRVLVRPDTGLDVTVRKNHCLDIGTDGSPVDPTYPDHYTRIKAEYEGPVRDESNTMFDQRSDLRHIETQ

Extended repression domain from residues 531 to 630:

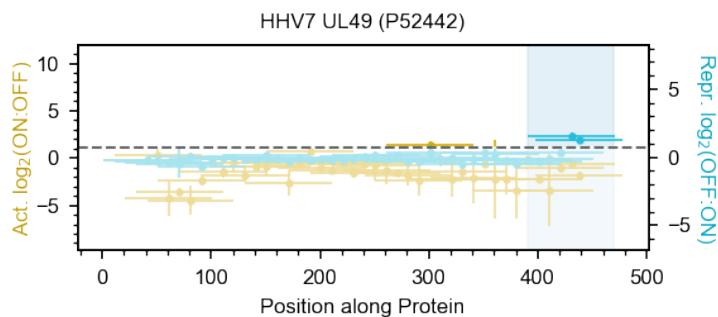
LDVTVRKNHCLDIGTDGSPVDPTYPDHYTRIKAEYEGPVRDESNTMFDQRSDLRHIETQASLNDHVYENIPPKEVGFNSSSLDVDSLNGYTSGDMHT  
D

Max tile of repression domain from residues 551 to 630 (estimated 33.7% to 39.5% of cells repressed):

VDPTYPDHYTRIKAEYEGPVRDESNTMFDQRSDLRHIETQASLNDHVYENIPPKEVGFNSSSLDVDSLNGYTSGDMHTD

HHV7 UL49 (P52442)

Gene: U33 ; Protein Family: UL49



Extended repression domain from residues 391 to 477:

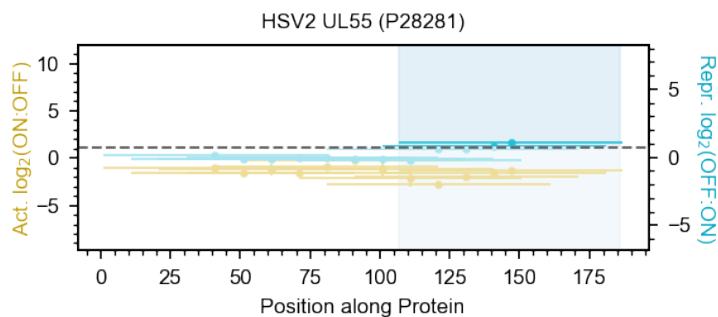
CTILNDSVKFDAIVACSCRTCYSMIHLQNLTIKLLKLISHSTEFQCQDCQNIYRETCLDLEDGEICTGCKISQLAKCTQHGCDTW

Max tile of repression domain from residues 391 to 470 (estimated 25.3% to 38.2% of cells repressed):

CTILNDSVKFDAIVACSCRTCYSMIHLQNLTIKLLKLISHSTEFQCQDCQNIYRETCLDLEDGEICTGCKISQLAKCT

HSV2 UL55 (P28281)

Gene: UL55 ; Protein Family: UL55



Extended repression domain from residues 101 to 186:

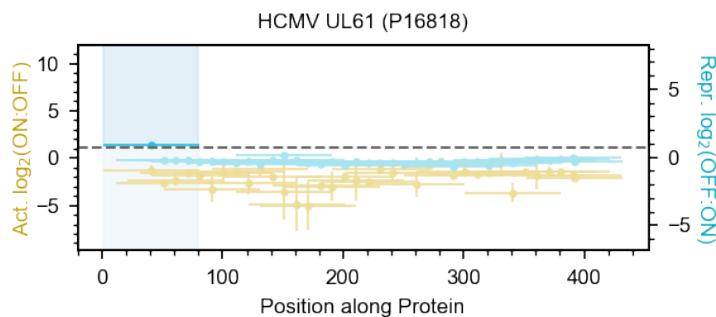
DKRGGRRLRCTGPFSCGTIKDVSGASPAGEYTINGIVYHCHCRYPFSKTCWLGASAALQHLRSISSLSSGTAAARAAEQRRHKIKIKIV

Max tile of repression domain from residues 107 to 186 (estimated 20.6% to 21.3% of cells repressed):

LRCTGPFSCGTIKDVSGASPAGEYTINGIVYHCHCRYPFSKTCWLGASAALQHLRSISSLSSGTAAARAAEQRRHKIKIKIV

HCMV UL61 (P16818)

Gene: UL61 ; Protein Family: UL61



Extended repression domain from residues 1 to 80:

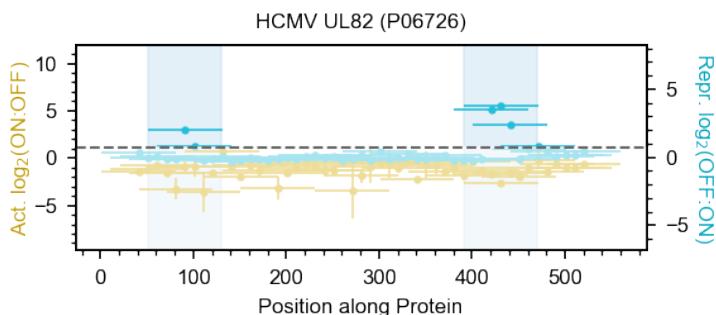
LWRGVLTIEVSWRPTVDPERFRPHPTSPPHRPAHTPQPGVRGADPGWAADGGRGVGDHAQGQQAAATVRAEFFWGAAGE

Max tile of repression domain from residues 1 to 80 (estimated 16.5% to 16.9% of cells repressed):

LWRGVLTIEVSWRPTVDPERFRPHPTSPPHRPAHTPQPGVRGADPGWAADGGRGVGDHAQGQQAAATVRAEFFWGAAGE

## HCMV UL82 (P06726)

Gene: UL82 ; Protein Family: UL82



Extended repression domain from residues 51 to 140:

GRLRLLLDLRTNIEVSRPCVLCCFQENKSPHDTVDLTDLNKGRCVVGEQDRLLVDLNNFGPRLTPGSENNNTSVLAFA PLD RVPVSGL

Max tile of repression domain from residues 51 to 130 (estimated 43.2% to 45.4% of cells repressed):

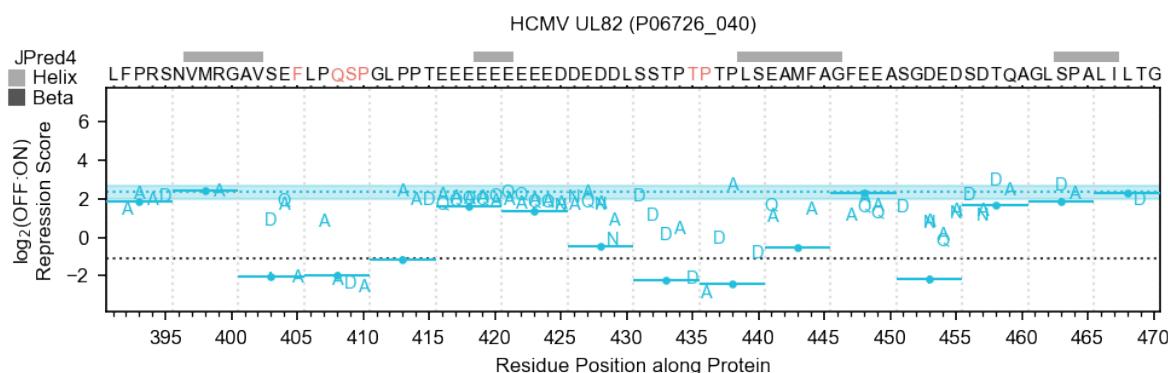
GRLRLLLDLRTNIEVSRPCVLCCFQENKSPHDTVDLTDLNKGRCVVGEQDRLLVDLNNFGPRLTPGSENNNTSVLAFA L

Extended repression domain from residues 381 to 480:

KR PQVQLRAGLFPRSNVMRGAVSEFLPQSPGLPPTEEEEEEEEDDEDDLSSTPTPLSEAMFAGFEEASGDEDSDTQAGLSPALILT GQR RRS GNN GA

Max tile of repression domain from residues 391 to 470 (estimated 84.9% to 86.4% of cells repressed):

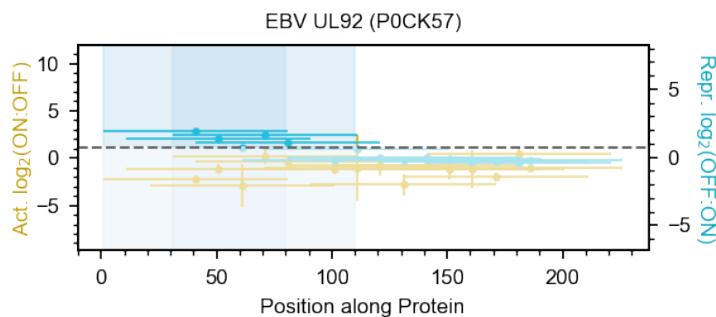
LFP RS NVM RG AVSEFLPQSPGLPPTEEEEEEEEDDEDDLSSTPTPLSEAMFAGFEEASGDEDSDTQAGLSPALILT G



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
MYND_1	410	414	PGLPP	Yes	401	415	AVSEFLPQSPGLPT
	-	-		No	431	440	SSTPTPTPLS
	-	-		No	451	455	SGDED

EBV UL92 (P0CK57)

Gene: BDLF4 ; Protein Family: UL92



Max tile of repression domain from residues 1 to 80 (estimated 37.5% to 44.4% of cells repressed):

MSDQGRLSLPRGEGGTDEPNPRHLCYSKLEFHLPLPESMASVFACWGCHEYHVCDSSECTLIETHEGVVCALTGNYMG

Extended repression domain from residues 31 to 120:

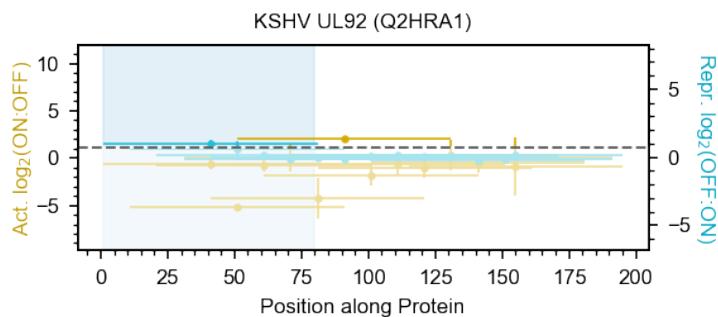
EFHLPLPESMASVFACWGCHEYHVCDSSECTLIETHEGVVCALTGNYMGPHFQPALRPWEIRQDTQDQRDKWEPEQVQGLVKTVNHL

Max tile of repression domain from residues 31 to 110 (estimated 29.5% to 38.2% of cells repressed):

EFHLPLPESMASVFACWGCHEYHVCDSSECTLIETHEGVVCALTGNYMGPHFQPALRPWEIRQDTQDQRDKWEPEQVQ

KSHV UL92 (Q2HRA1)

Gene: ORF31 ; Protein Family: UL92



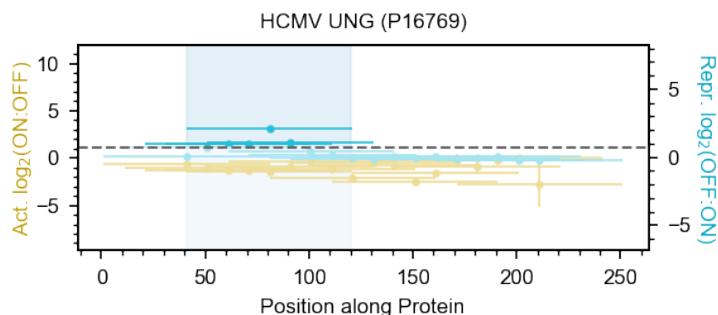
Extended repression domain from residues 1 to 80:

MKSVASPLCQFHGVFCLYQCRQCLAYHVCDGGAECVLLHTPESVICELTGNCMLGNIQEGQFLGPVPYRTLDNQVDRDAY

Max tile of repression domain from residues 1 to 80 (estimated 15.6% to 24.9% of cells repressed):

MKSVASPLCQFHGVFCLYQCRQCLAYHVCDGGAECVLLHTPESVICELTGNCMLGNIQEGQFLGPVPYRTLDNQVDRDAY

HCMV UNG (P16769)  
Gene: UL114 ; Protein Family: UNG

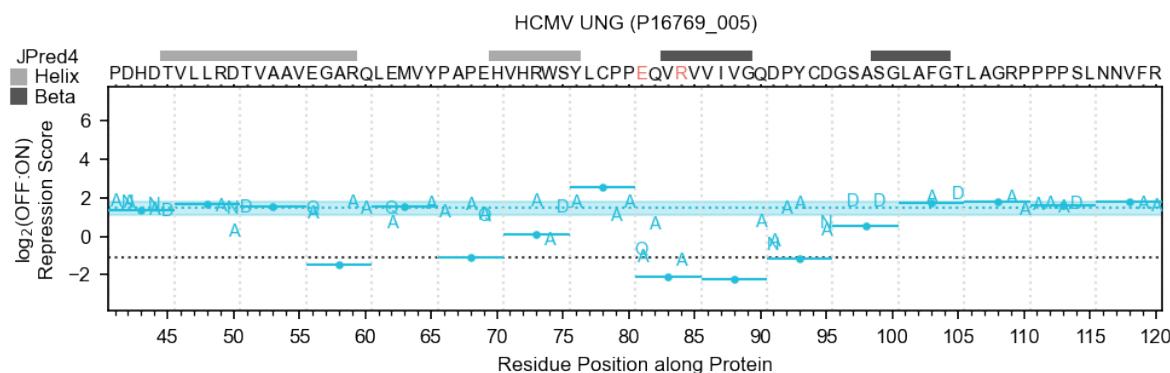


Extended repression domain from residues 11 to 130:

IADNKGSLLTPDEQARVFCLSADWIRFLSLPDHDTVLLRDTVAAVEGARQLEMVYPAPEHVHRWSYLCPP EQVRVVIVGQDPYCDGSASGLAFGLAGR  
PPPSLNNVFR ELARTV DGFQ

Max tile of repression domain from residues 41 to 120 (estimated 42.7% to 52.9% of cells repressed):

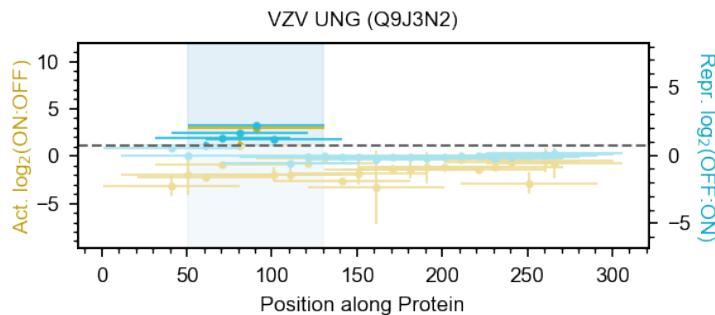
PDHDTVLLRDTVAAVEGARQLEMVYPAPEHVHRWSYLCPP EQVRVVIVGQDPYCDGSASGLAFGLAGR PPPPSLNNVFR



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	44	51	DTVLLRDT	No	-	-	
	-	-		No	56	60	EGARQ
	-	-		No	66	70	PAPEH
flexi_NRBOX	82	88	QVRVVIV	Yes	81	95	EQVRVVIVGQDPYCD
CtBP_expanded	112	116	PPSLN	No	-	-	
flexi_NRBOX	114	120	SLNNVFR	No	-	-	

## VZV UNG (Q9J3N2)

Gene: ORF59 ; Protein Family: UNG

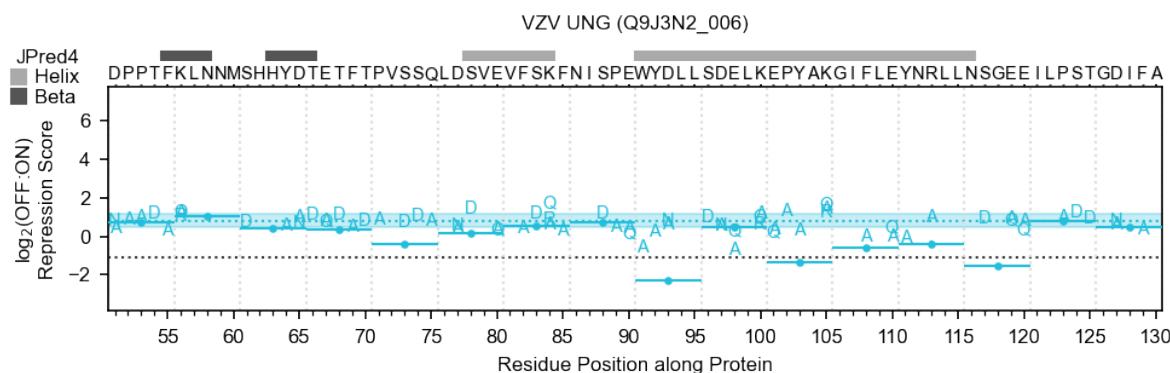


Extended repression domain from residues 21 to 140:

SDSKDIYVLAHPVTKKTRPRGPPPLGVKLDPTFKLNNMSHHYDTETFTPVSSQLDSVEVFSKFNISPEWYDLLSDELKEPYAKGIFLEYNRLLNSGEEIL  
PSTGDIFAWTRFCGPQSI

Max tile of repression domain from residues 51 to 130 (estimated 46.4% to 51.2% of cells repressed):

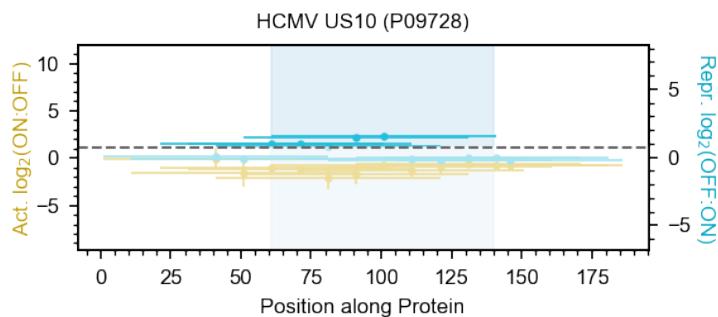
DPPTFKLNNMSHHYDTETFTPVSSQLDSVEVFSKFNISPEWYDLLSDELKEPYAKGIFLEYNRLLNSGEEILPSTGDIFA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	90	96	EWYDLLS	Yes	91	95	WYDLL
SUMO_rev	93	102	DLLSDELKEP	Yes	91	95	WYDLL
SUMO_rev	93	102	DLLSDELKEP	Yes	101	105	E PYAK
	-	-		No	116	120	NSGEE

HCMV US10 (P09728)

Gene: US10 ; Protein Family: US10



Extended repression domain from residues 21 to 140:

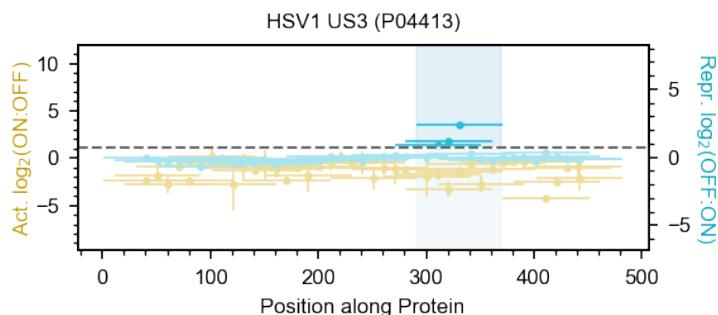
VVAATEETREPTYFTCGCVIQNHVLKGAVKLYGQFPSPKTLRASAWLHDGENHERHRQPILVGTATATEALYILLPTELSSPEGNRPRNYSATLTLASRDCYERFVCPVYDSGTPMGV

Max tile of repression domain from residues 61 to 140 (estimated 30.7% to 32.3% of cells repressed):

TLRASAWLHDGENHERHRQPILVGTATATEALYILLPTELSSPEGNRPRNYSATLTLASRDCYERFVCPVYDSGTPMGV

## HSV1 US3 (P04413)

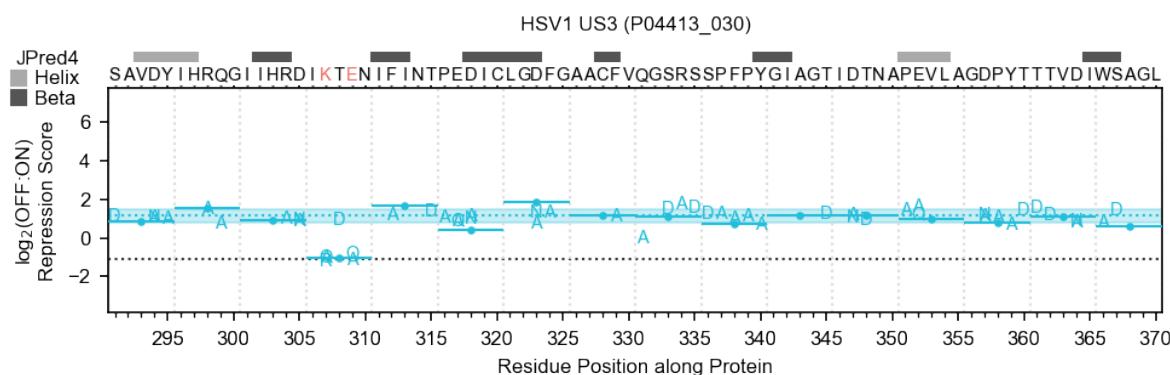
Gene: US3 ; Protein Family: US3



Extended repression domain from residues 271 to 370:

SRLNPLGRPQIAAVSRQLLSAVDYIHRQGIIHRDIKTENIFINTPEDICLGDFGAACFVQGSRSSPFYGIAGTIDTNAPEVLAGDPYTTVDIWSAGL

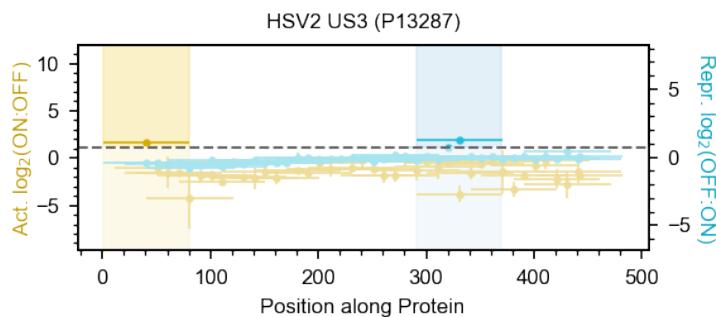
Max tile of repression domain from residues 291 to 370 (estimated 53.1% to 55.4% of cells repressed):

SAVDYIHRQGIIHRDIKTENIFINTPEDICLGDFGAACFVQGSRSSPFYGIAGTIDTNAPEVLAGDPYTTVDIWSAGL

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_for	306	309	IKTE	No	-	-	
SUMO_SIM_par	360	367	TTTVDIWS	No	-	-	

## HSV2 US3 (P13287)

Gene: US3 ; Protein Family: US3



Extended activation domain from residues 1 to 80:

MACRKFCGVYRRPDKRQEASVPPETNTAPAFPASTFYTPAEDAYLAPGPPETIHPSPGEARLCQLQEILAQMHS

Max tile of activation domain from residues 1 to 80 (estimated 2.7% to 4.1% of cells activated):

MACRKFCGVYRRPDKRQEASVPPETNTAPAFPASTFYTPAEDAYLAPGPPETIHPSPGEARLCQLQEILAQMHS

Extended repression domain from residues 281 to 370:

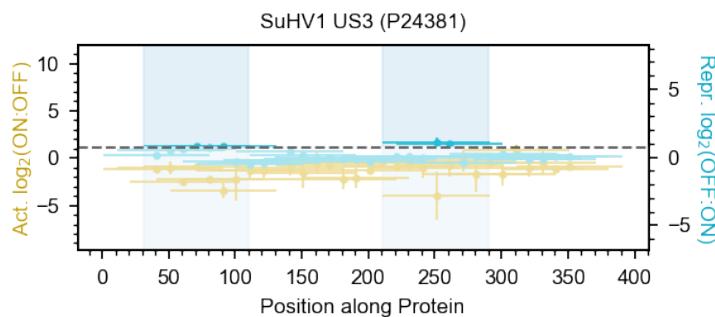
QITAVSRQLLSAIDYVHCKGIIHRDIKTENIFINTPENICLGDFAACFVRGCRSSPFHYGIAGTIDTNAPEVLAGDPYTQVIDIWSAGL

Max tile of repression domain from residues 291 to 370 (estimated 25.2% to 26.3% of cells repressed):

SAIDYVHCKGIIHRDIKTENIFINTPENICLGDFAACFVRGCRSSPFHYGIAGTIDTNAPEVLAGDPYTQVIDIWSAGL

## SuHV1 US3 (P24381)

Gene: - ; Protein Family: US3



Extended repression domain from residues 31 to 130:

CSLYLAGLSRGLSRVHAQRSHAATMADAGIPDEILYSDISDDEIIIDGDGDGDSSGDEDDDDGGLTRQAASRIATDLGFEVLQPLQSGSEGRVFVARPG

Max tile of repression domain from residues 31 to 110 (estimated 15.9% to 16.7% of cells repressed):

CSLYLAGLSRGLSRVHAQRSHAATMADAGIPDEILYSDISDDEIIIDGDGDGDSSGDEDDDDGGLTRQAASRIATDLGFE

Extended repression domain from residues 211 to 300:

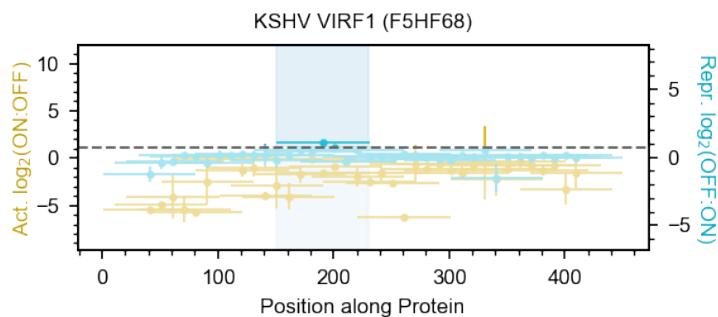
LAYLHGMRIMHRDVKAENIFLEDVDTVCLGDLGAARCNVAAPNFYGLAGTIETNAPEVLARDYDTKVDVGAGVLFETLAYPKTIAGG

Max tile of repression domain from residues 211 to 290 (estimated 15.4% to 29.6% of cells repressed):

LAYLHGMRIMHRDVKAENIFLEDVDTVCLGDLGAARCNVAAPNFYGLAGTIETNAPEVLARDYDTKVDVGAGVLFET

KSHV VIRF1 (F5HF68)

Gene: K9 ; Protein Family: VIRF



Extended repression domain from residues 151 to 240:

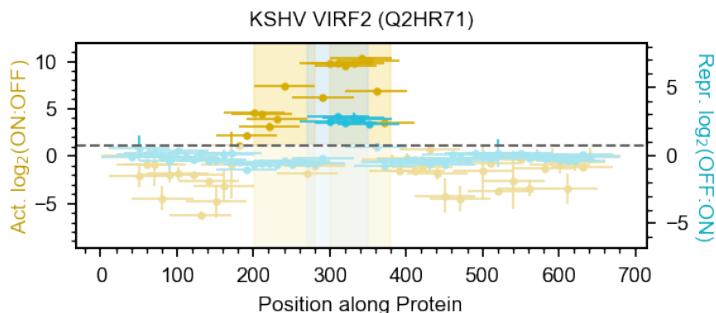
VDASF KGTRRRRMLAALRRTRGLQEIGKGISQDGHHFLVFRVRKPEEEQCVECGVVAGAVHDFNNMARLLQEGFFSPGQCLPGEIVTPV

Max tile of repression domain from residues 151 to 230 (estimated 16.8% to 24.0% of cells repressed):

VDASF KGTRRRRMLAALRRTRGLQEIGKGISQDGHHFLVFRVRKPEEEQCVECGVVAGAVHDFNNMARLLQEGFFSPGQ

## KSHV VIRF2 (Q2HR71)

Gene: K11 ; Protein Family: VIRF



Extended activation domain from residues 141 to 280:

IYPHDDKHREKALRRSLRKKAQREAARKQAAAVATPTTSSAAEVSSRSQSEDTESSDSENELVWGAQGFVGRDMHSLFFEEPEPSFGSSGQSSLLA  
PDSPRPSTSQVGPLHVHTPTDLCLPTGGLPSPVIFPHETQG

Max tile of activation domain from residues 201 to 280 (estimated 81.1% to 81.6% of cells activated):

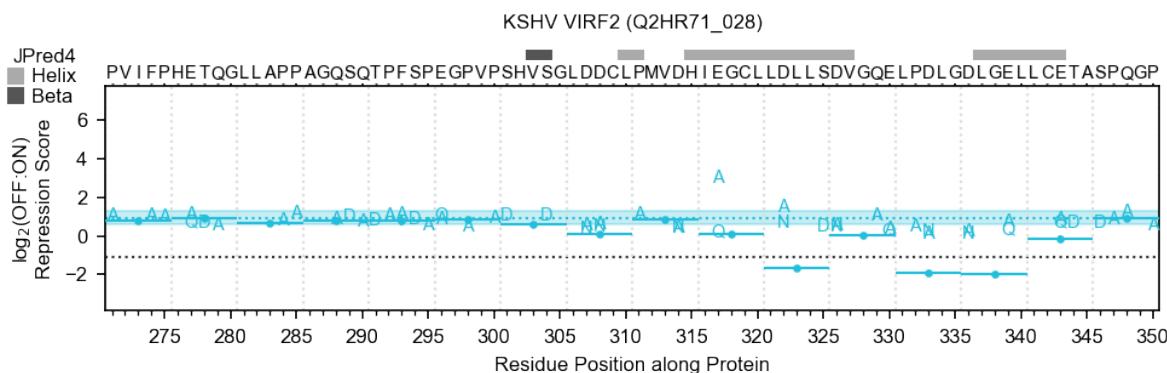
ELWVGAQGFVGRDMHSLFFEEPEPSFGSSGQSSLLAPDSRPSTSQVGPLHVHTPTDLCLPTGGLPSPVIFPHETQG

Extended repression domain from residues 261 to 390:

LCLPTGGLPSPVIFPHETQGLLAPPAGQSQTFSPEGPVPSHVSGLDDCLPMVDHIEGCLLDLLSDVGQELPDLGDLGELLCETASPQGPMQSEGGEEG  
STESVSVPATHPLESSAPGASVMGSGQELP

Max tile of repression domain from residues 271 to 350 (estimated 62.7% to 70.7% of cells repressed):

PVIFPHETQGLLAPPAGQSQTFSPEGPVPSHVSGLDDCLPMVDHIEGCLLDLLSDVGQELPDLGDLGELLCETASPQGP



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	319	326	CLLDLLSD	Yes	321	325	LDLLS
LIG_NRBOX	319	325	CLLDLLS	Yes	321	325	LDLLS
LIG_NRBOX	336	342	DLGELLC	Yes	331	340	LPDLGDLGEL

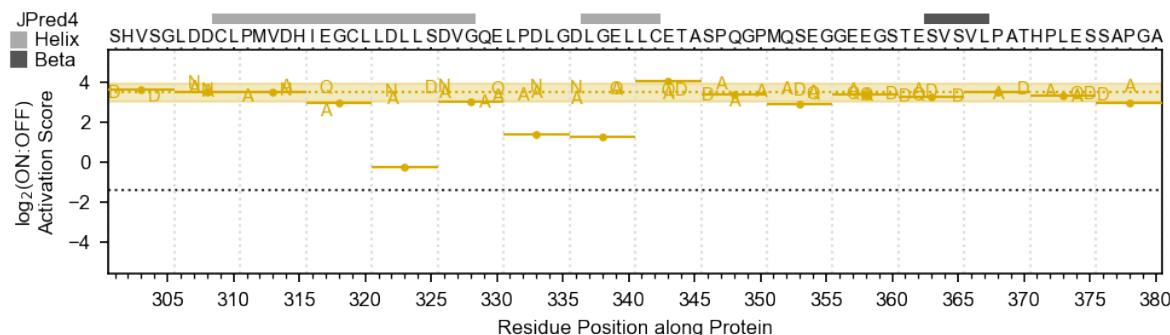
Extended activation domain from residues 251 to 410:

GPLHVHTPTDLCCLPTGGLPSPVIFPHETQGLLAPPAGQSQTFSPEGPVPSHVSGLDDCLPMVDHIEGCLLDLLSDVGQELPDLGDLGELLCETASPQGP  
MQSEGGEEGSTESVSVPATHPLESSAPGASVMGSGQELPDLGDLSELLCETASPQGPMQ

Max tile of activation domain from residues 301 to 380 (estimated 96.7% to 96.7% of cells activated):

SHVSGLDDCLPMVDHIEGCLLDLLSDVGQELPDLGDLGELLCETASPQGPMQSEGGEEGSTESVSVPATHPLESSAPGA

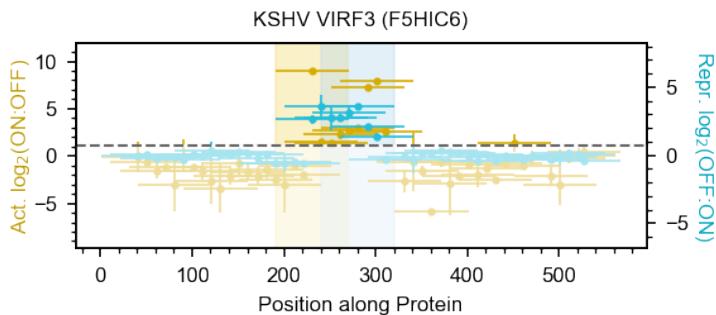
## KSHV VIRF2 (Q2HR71\_031)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	319	325	CLLDLLS	No	-	-	
SUMO_SIM_par	319	326	CLLDLLSD	No	-	-	
LIG_NRBOX	336	342	DLGELLC	No	-	-	
SUMO_SIM_anti	360	368	STESVSVLP	No	-	-	

## KSHV VIRF3 (F5HIC6)

Gene: K10.5 ; Protein Family: VIRF



Extended activation domain from residues 191 to 350:

TRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPPDAETTVHTDNVEDDLTLLDKESACALMYHVGQEMDMLMRAMCDEDLFDLLGIPEDVIATS QPGGDTDASGVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEVDDGAGLPPAS

Max tile of activation domain from residues 191 to 270 (estimated 93.0% to 94.1% of cells activated):

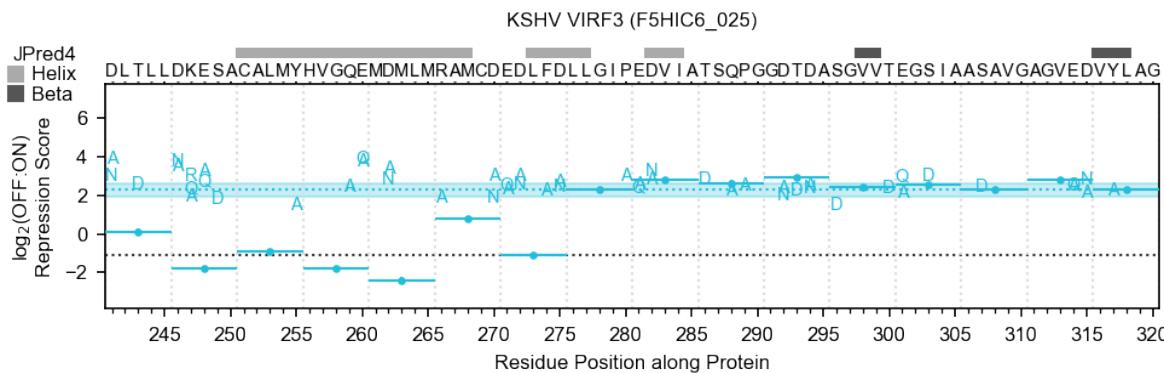
TRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPPDAETTVHTDNVEDDLTLLDKESACALMYHVGQEMDMLRAMCD

Extended repression domain from residues 191 to 340:

TRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPPDAETTVHTDNVEDDLTLLDKESACALMYHVGQEMDMLRAMCDEDLFDLLGIPEDVIATS QPGGDTDASGVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

Max tile of repression domain from residues 241 to 320 (estimated 81.6% to 84.0% of cells repressed):

DLTLLDKESACALMYHVGQEMDMLMRAMCDEDLFDLLGIPEDVIATSQPGGDTDASGVTEGSIAASAVGAGVEDVYLAG



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	241	246	DLTLLD	Yes	246	250	DKESA
LIG_NRBOX	-	-		No	256	265	HVGQEMDMLM
LIG_NRBOX	272	278	DLF DLLG	Yes	271	275	EDLFD

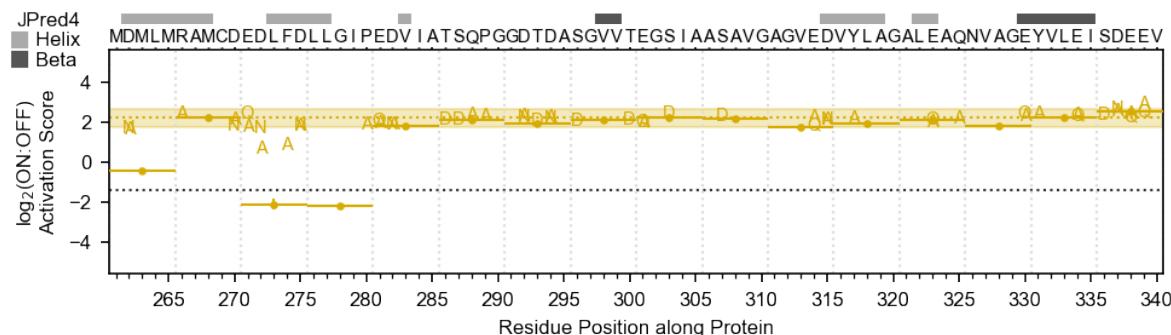
Extended activation domain from residues 191 to 340:

TRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPPDAETTVHTDNVEDDLTLLDKESACALMYHVGQEMDMLRAMCDEDLFDLLGIPEDVIATS QPGGDTDASGVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

Max tile of activation domain from residues 261 to 340 (estimated 83.9% to 88.5% of cells activated):

MDMLMRAMCDEDLFDLLGIPEDVIATSQPGGDTDASGVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

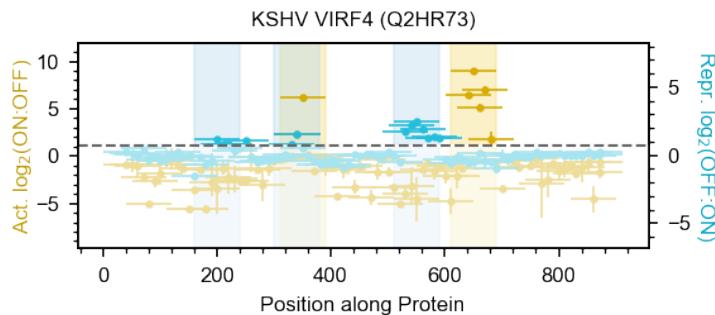
## KSHV VIRF3 (F5HIC6\_027)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
LIG_NRBOX	272	278	DLFDLLG	Yes	271	280	EDLF DLLGIP
SUMO_SIM_par	330	339	EYVLEISDEE	No	-	-	

## KSHV VIRF4 (Q2HR73)

Gene: K10 ; Protein Family: VIRF



Extended repression domain from residues 161 to 260:

EEAGAAAPAPPKAPSGLRGRPRKSNRYYNVGDIITTEQKAACSVWIPVNEGASTSGMGSSGTRQVTQASSFTWRVPGDPPAPSTLTGPSDPHSSGAGLPGT

Max tile of repression domain from residues 161 to 240 (estimated 21.4% to 25.0% of cells repressed):

EEAGAAAPAPPKAPSGLRGRPRKSNRYYNVGDIITTEQKAACSVWIPVNEGASTSGMGSSGTRQVTQASSFTWRVPGDPPA

Extended repression domain from residues 291 to 380:

LAPPMRDGSRSLPSTSPWIPACFPWGDLPTGVWWPQGASGLPEKVHPPTTGQFDPLSPRWTYTGIPSSQLNPAAPSWIPPHAQAGTFVGEF

Max tile of repression domain from residues 301 to 380 (estimated 28.5% to 34.7% of cells repressed):

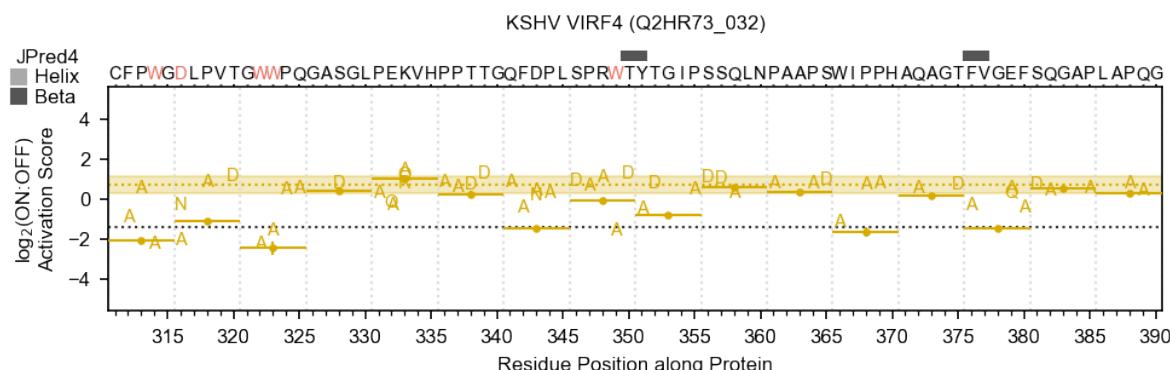
LPSTSPWIPACFPWGDLPTGVWWPQGASGLPEKVHPPTTGQFDPLSPRWTYTGIPSSQLNPAAPSWIPPHAQAGTFVGEF

Extended activation domain from residues 301 to 390:

LPSTSPWIPACFPWGDLPTGVWWPQGASGLPEKVHPPTTGQFDPLSPRWTYTGIPSSQLNPAAPSWIPPHAQAGTFVGEFSQGAPLAPQG

Max tile of activation domain from residues 311 to 390 (estimated 58.1% to 62.1% of cells activated):

CFPWGDLPTGVWWPQGASGLPEKVHPPTTGQFDPLSPRWTYTGIPSSQLNPAAPSWIPPHAQAGTFVGEFSQGAPLAPQG



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	311	315	CFPWG
-	-	-		No	321	325	GWWPQ
-	-	-		No	341	345	QFDPL
-	-	-		No	366	370	WIPPH
-	-	-		No	376	380	FVGEF

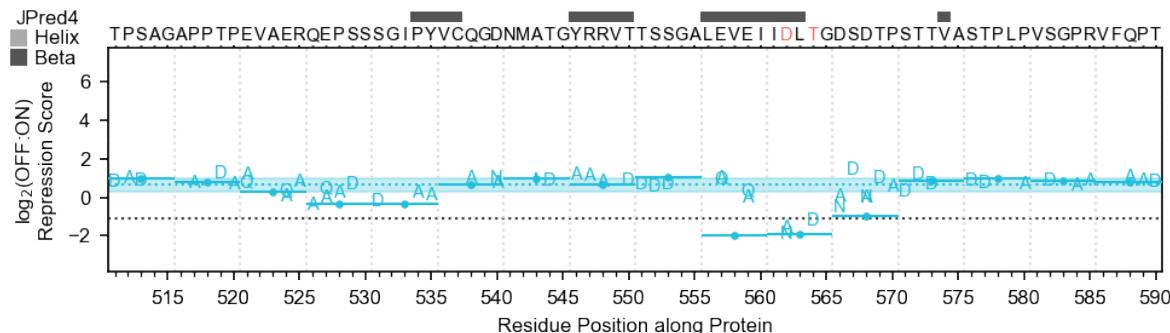
Extended repression domain from residues 491 to 630:

WSSGGAPNQGLSHTQGGASATPSAGAPPTPEVAERQEPSSSGIPYVCQGDNMATGYRRVTTSSGALEVEIIDLTGDSDTPSTTVASTPLPVSGPRVFQPTVLYSAPEPAVNPEVSHLPTELERRECVCPEGSERPRVPLV

Max tile of repression domain from residues 511 to 590 (estimated 54.2% to 58.2% of cells repressed):

TPSAGAPPTPEVAERQEPSSSGIPYVCQGDNMATGYRRVTTSSGALEVEIIDLTGDSDTPSTTVASTPLPVSGPRVFQPT

## KSHV VIRF4 (Q2HR73\_052)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_anti	557	562	EVEIID	Yes	556	565	LEVEIIDLTG
SUMO_SIM_par	559	564	EIIDLT	Yes	556	565	LEVEIIDLTG

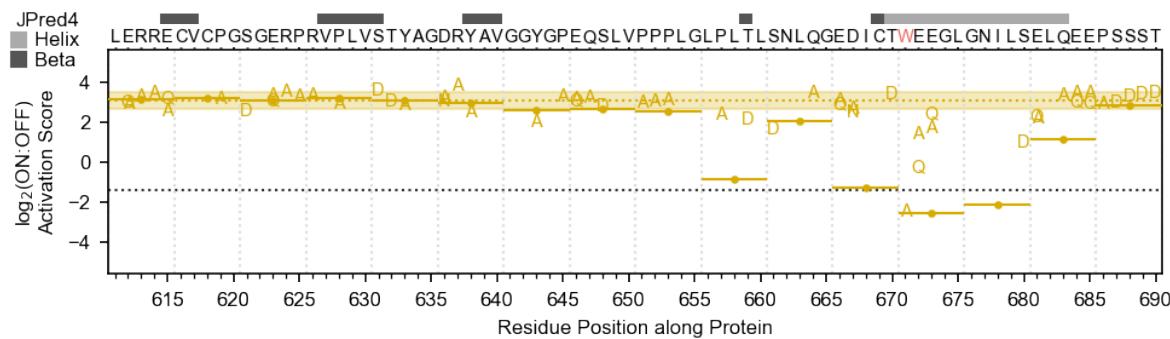
Extended activation domain from residues 601 to 720:

NPEVSHLPTELERRECVCVPGSGERPRVPLVSTYAGDRYAVGGYGPEQSLVPPPLGLPLTLSNLQGEDICTWEEGLGNILSELQEEPSSSTRQATDRRRP  
RSRSPHGRRTPVSHSGPEKPP

Max tile of activation domain from residues 611 to 690 (estimated 92.9% to 93.9% of cells activated):

LERRECVCVPGSGERPRVPLVSTYAGDRYAVGGYGPEQSLVPPPLGLPLTLSNLQGEDICTWEEGLGNILSELQEEPSSST

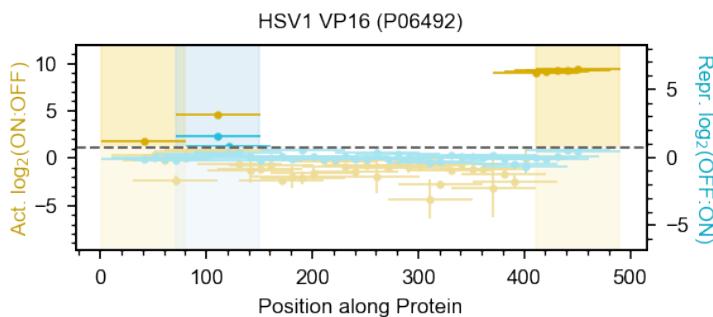
## KSHV VIRF4 (Q2HR73\_062)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_SIM_par	656	661	LPLTLS	No	-	-	
flexi_NRBOX	674	680	GLGNILS	Yes	671	680	WEEGLGNILS

## HSV1 VP16 (P06492)

Gene: UL48 ; Protein Family: VP16



Extended activation domain from residues 1 to 80:

MDLLVDELFADMNADGASPPPPRPGPKNTPAAPPLYATGRLSQAQLMPSPPMPVPPAALFNRLDDLGFSAGPALCTM

Max tile of activation domain from residues 1 to 80 (estimated 3.3% to 4.2% of cells activated):

MDLLVDELFADMNADGASPPPPRPGPKNTPAAPPLYATGRLSQAQLMPSPPMPVPPAALFNRLDDLGFSAGPALCTM

Extended repression domain from residues 71 to 160:

FSAGPALCTMLDTWNEDLFSALPTNADLYRECKFLSTLPSDVVEWDAYVPERTQIDIRAHGDVAFPTLPATRDGLGLYYEALSRFFHAE

Max tile of repression domain from residues 71 to 150 (estimated 29.3% to 33.2% of cells repressed):

FSAGPALCTMLDTWNEDLFSALPTNADLYRECKFLSTLPSDVVEWDAYVPERTQIDIRAHGDVAFPTLPATRDGLGLYY

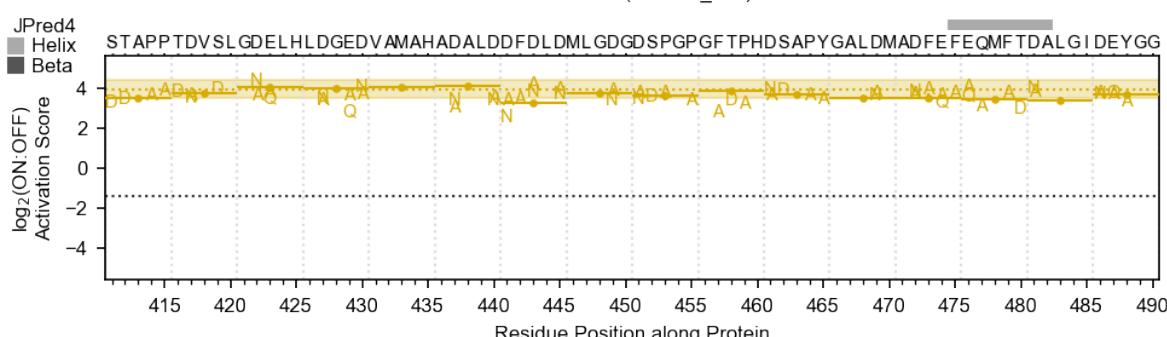
Extended activation domain from residues 371 to 490:

NNYGSTIEGLLDPLPDDDAPEEAGLAAPRLSPAGHTRRLSTAPPTDVLGDELHLDGEDVAMAHADALDDFDLDMGLGDSPGPGFTPHDSAPYGA  
DMADFEFEQMFTDALGIDEYGG

Max tile of activation domain from residues 411 to 490 (estimated 94.4% to 95.0% of cells activated):

STAPPTDVSLGDELHLDGEDVAMAHADALDDFDLDMGLGDSPGPGFTPHDSAPYGA  
LDMAFDFEFEQMFTDALGIDEYGG

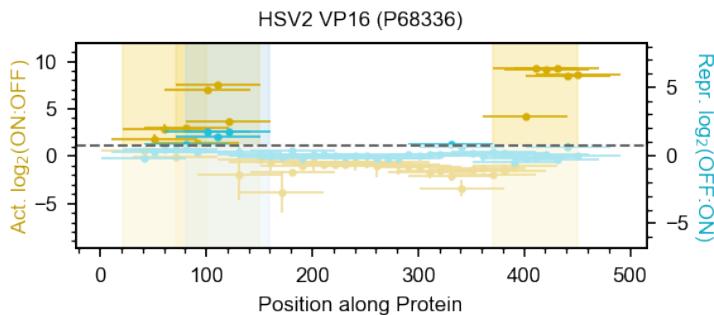
## HSV1 VP16 (P06492\_042)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	-	-	

## HSV2 VP16 (P68336)

Gene: UL48 ; Protein Family: VP16



Extended activation domain from residues 11 to 100:

DADGVSPPPPRPAGGPKNTPAAPPLYATGRLSQAQLMPSPPMPVPPAALFNRLDDLGFSAGPALCTMLDTWNEDLFGFPTNADMYREC

Max tile of activation domain from residues 21 to 100 (estimated 5.6% to 11.3% of cells activated):

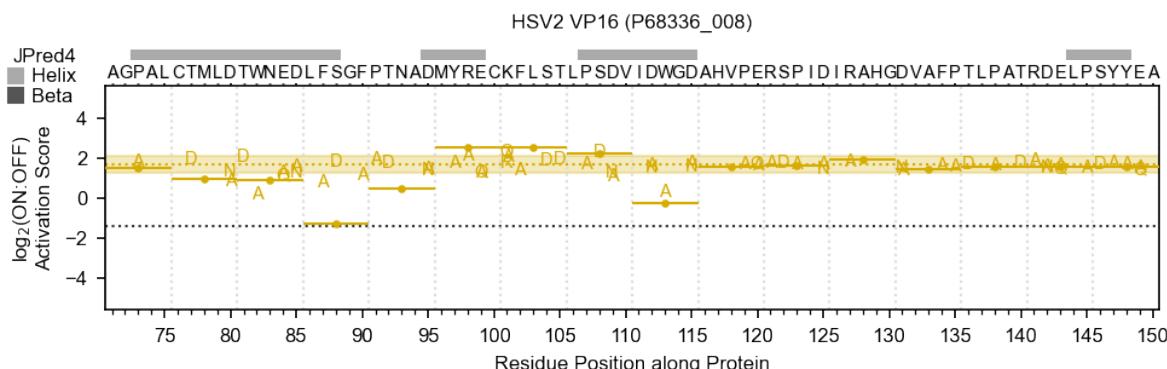
RPAGGPKNTPAAPPLYATGRLSQAQLMPSPPMPVPPAALFNRLDDLGFSAGPALCTMLDTWNEDLFGFPTNADMYREC

Extended activation domain from residues 41 to 160:

LSQAQLMPSPPMPVPPAALFNRLDDLGFSAGPALCTMLDTWNEDLFGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFTPLPA TRDELPSSYYEAMAQFFRGELR

Max tile of activation domain from residues 71 to 150 (estimated 83.3% to 83.4% of cells activated):

AGPALCTMLDTWNEDLFGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFTPLPATRDELPSSYYEA



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
SUMO_rev	95	103	DMYRECKFL	No	-	-	

Extended repression domain from residues 61 to 160:

NRLLDDLGFSAGPALCTMLDTWNEDLFGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFTPLPATRDELPSSYYEAMAQFFRGELR

Max tile of repression domain from residues 81 to 160 (estimated 33.6% to 40.3% of cells repressed):

TWNEDLFGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFTPLPATRDELPSSYYEAMAQFFRGELR

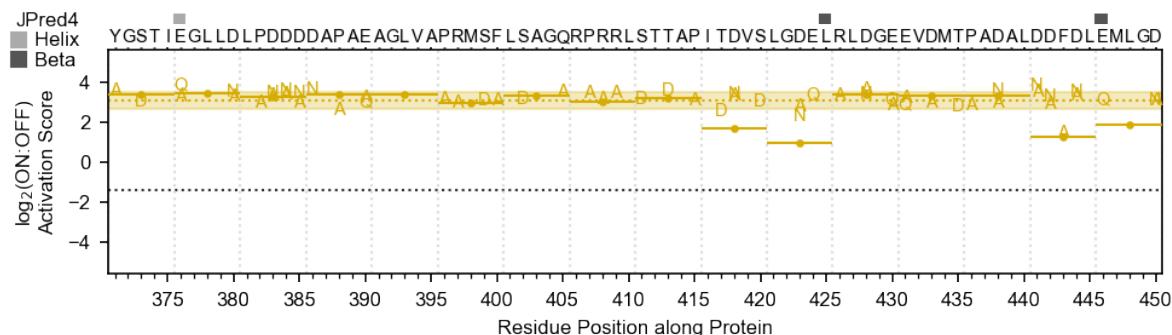
Extended activation domain from residues 361 to 490:

AYSRGRTRNNYGGSTIEGLLDPLDDDDAPAEAGLVAPRMSFLSAGQRPRRLSTTAPITDVSLGDELRLDGEEVDMTPADALDDFDLEMLGDVESPGMT HDPVSYGALDVDDFEFEQMFTDAMGIDDGG

Max tile of activation domain from residues 371 to 450 (estimated 94.4% to 94.7% of cells activated):

YGSTIEGLLDPLDDDDAPAEAGLVAPRMSFLSAGQRPRRLSTTAPITDVSLGDELRLDGEEVDMTPADALDDFDLEMLGD

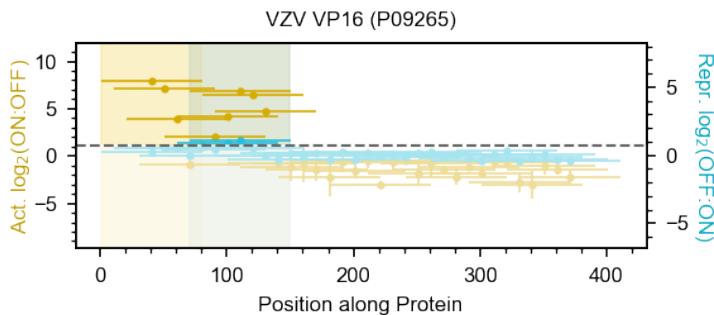
HSV2 VP16 (P68336\_038)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
flexi_NRBOX	374	380	TIEGLLD	No	-	-	
SUMO_SIM_par	376	386	EGLLDLPDDDD	No	-	-	

## VZV VP16 (P09265)

Gene: ORF10 ; Protein Family: VP16



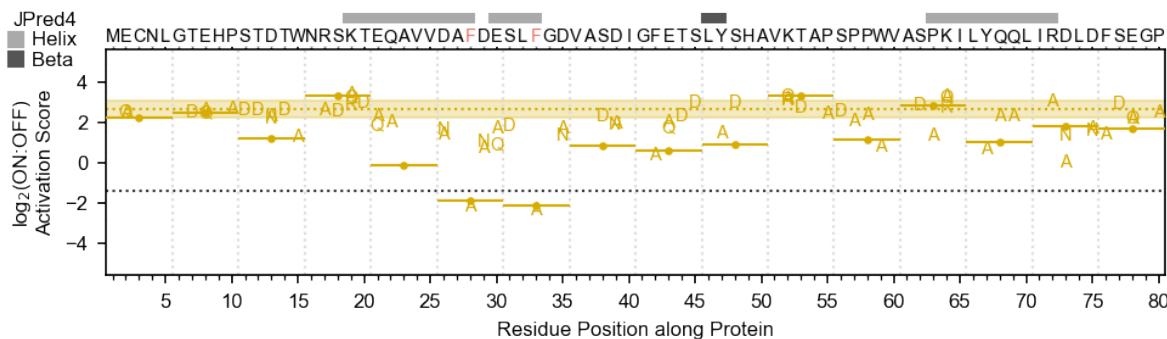
Extended activation domain from residues 1 to 100:

MECNLGTEHPSTDTWNRSKTEQAVVDAFDESLSFGDVASDIGFETSLYSHAVKTAPSPPWASPKILYQQLIRDLDSEGPRLLSCLTWNEDLFSCFPIN

Max tile of activation domain from residues 1 to 80 (estimated 85.1% to 87.5% of cells activated):

MECNLGTEHPSTDTWNRSKTEQAVVDAFDESLSFGDVASDIGFETSLYSHAVKTAPSPPWASPKILYQQLIRDLDSEGPRLLSCLTWNEDLFSCFPIN

## VZV VP16 (P09265\_001)



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	26	35	DAFDESLSFGD

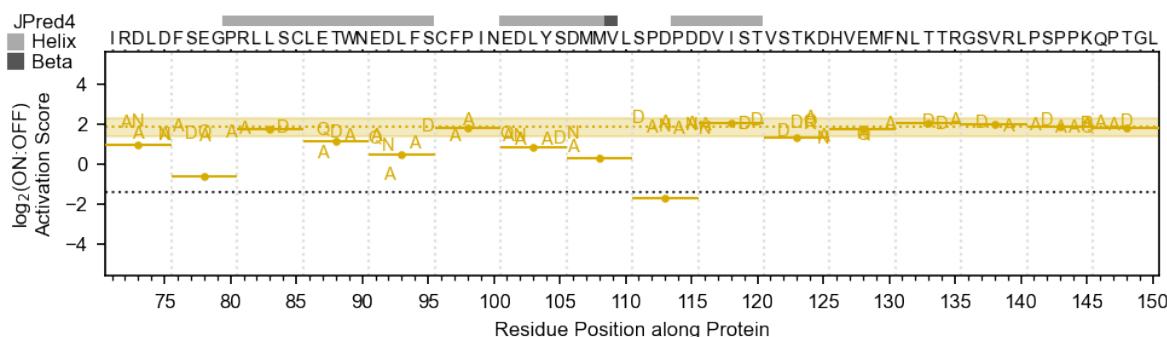
Extended activation domain from residues 51 to 170:

VKTAPSPPWASPKILYQQLIRDLDSEGPRLLSCLTWNEDLFSCFPINEDLYSDMMVLSPDPDDVISTVSTKDHVEMFNLTTRGSVRLPSPPKQPTGL  
PAYVQEVDQDSFTVELRAREE

Max tile of activation domain from residues 71 to 150 (estimated 71.2% to 75.5% of cells activated):

IRLDLDFSEGPRLLSCLTWNEDLFSCFPINEDLYSDMMVLSPDPDDVISTVSTKDHVEMFNLTTRGSVRLPSPPKQPTGL

## VZV VP16 (P09265\_008)



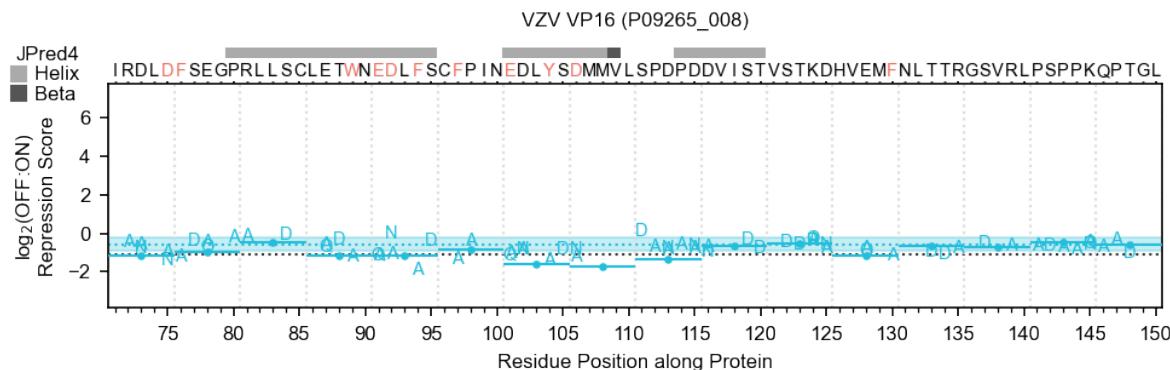
Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
	-	-		No	111	115	SPDPD

Extended repression domain from residues 61 to 150:

ASPKILYQQLIRDLDSEGPRLLSCLTWNEDLFSCFPINEDLYSDMMVLSPDPDDVISTVSTKDHVEMFNLTTRGSVRLPSPPKQPTGL

Max tile of repression domain from residues 71 to 150 (estimated 18.8% to 22.5% of cells repressed):

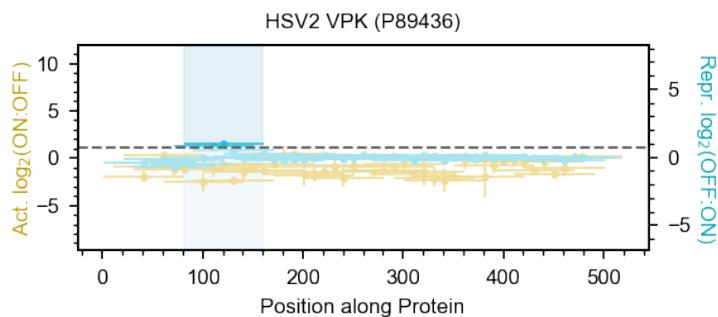
IRDLDSEGPRLLSCLETWNEDLFSCFPINEDLYSDMMVLSPDPDDVISTVSTKDHVEMFNLTRGSVRLPSPPKQPTGL



Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
-	-	-		No	71	75	IRDLD
-	-	-		No	86	95	LETWNEDLFS
-	-	-		No	101	115	EDLYSDMMVLSPDPD
-	-	-		No	126	130	HVEMF

HSV2 VPK (P89436)

Gene: UL13 ; Protein Family: VPK



Extended repression domain from residues 71 to 160:

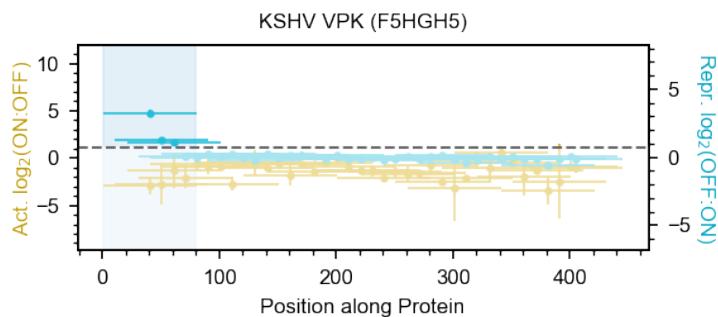
ERLRAGLSRWRSRSSRRSSPEAPGPAAKLRRPPLRSETAMTSPPSPPSHILSLARIHKLCIPVFAVNPALRYTTLIEIPGARSFGGSG

Max tile of repression domain from residues 81 to 160 (estimated 18.4% to 20.2% of cells repressed):

RVSRSRRSSPEAPGPAAKLRRPPLRSETAMTSPPSPPSHILSLARIHKLCIPVFAVNPALRYTTLIEIPGARSFGGSG

## KSHV VPK (F5IGH5)

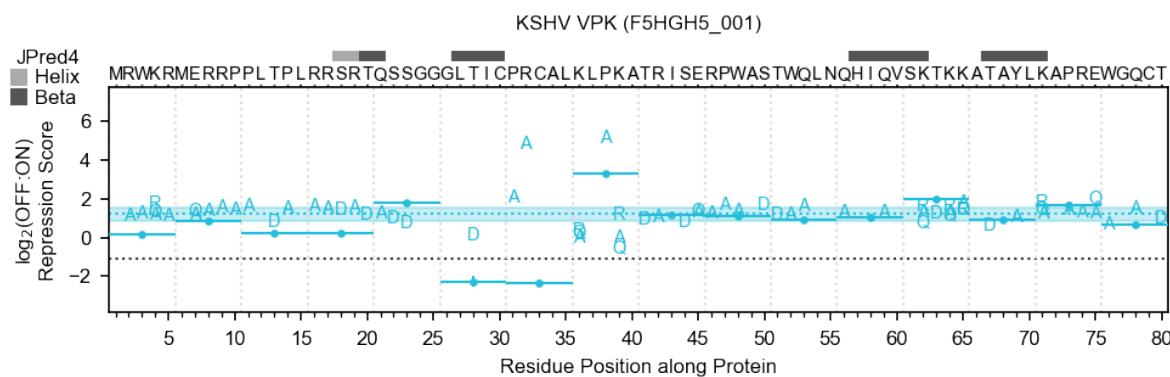
Gene: ORF36 ; Protein Family: VPK



Extended repression domain from residues 1 to 100:

MRWKRMRERRPPLTPLRRSRTQSSGGGLTICPRCALKLPKATRISERPWASTWQLNQHIQVSKTKKATAYLKA  
PREWGQCTHQDPDWSKRLGRGAFGII  
VP

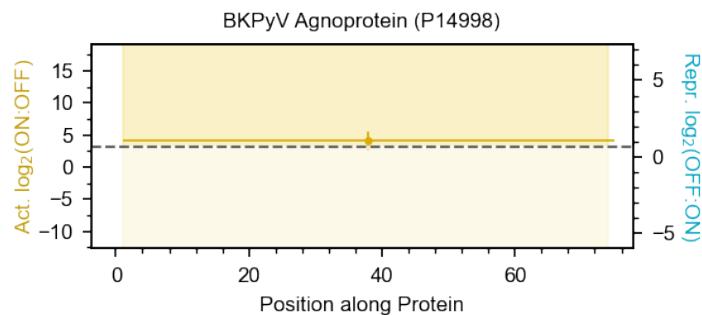
Max tile of repression domain from residues 1 to 80 (estimated 70.4% to 80.6% of cells repressed):

MRWKRMRERRPPLTPLRRSRTQSSGGGLTICPRCALKLPKATRISERPWASTWQLNQHIQVSKTKKATAYLKA  
PREWGQCT

Motif Name	Motif Start	Motif End	Motif Sequence	Overlaps Essential?	Essential Start	Essential End	Essential Sequence
MYND_1	10	14	PPLTP	No	-	-	
	-	-		No	26	35	GLTICPRCAL

BKPyV Agnoprotein (P14998)

Gene: Agnoprotein ; Protein Family: Agnoprotein



Extended activation domain from residues 1 to 74:

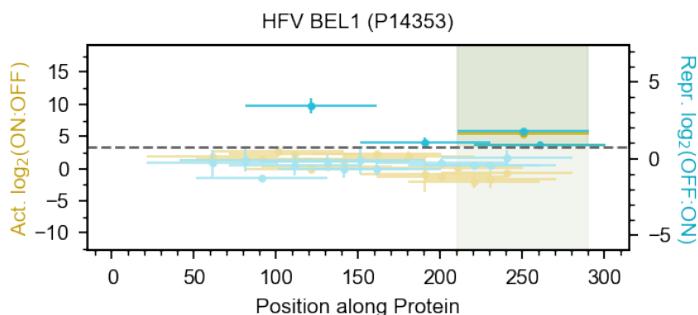
MFCEPKNLVVLRQLSRQASVKVGKTWTGKRAQRIFIFILELLLEFCRGEDSVDGKNKSTTALPAVKDSVKDS

Max tile of activation domain from residues 1 to 74 (estimated 9.1% to 47.6% of cells activated):

MFCEPKNLVVLRQLSRQASVKVGKTWTGKRAQRIFIFILELLLEFCRGEDSVDGKNKSTTALPAVKDSVKDS

## HFV BEL1 (P14353)

Gene: BEL1 ; Protein Family: BEL1



Extended activation domain from residues 211 to 300:

KHHKPRQKRPRRRSIDNESCASSDTMANEPGSLCTNPLWNPGPLLSQLLEESSNLNLEVHMSGGPFWEEVYGD SILGPPSGSGEHSV L

Max tile of activation domain from residues 211 to 290 (estimated 43.0% to 48.9% of cells activated):

KHHKPRQKRPRRRSIDNESCASSDTMANEPGSLCTNPLWNPGPLLSQLLEESSNLNLEVHMSGGPFWEEVYGD SILGP

Extended repression domain from residues 211 to 300:

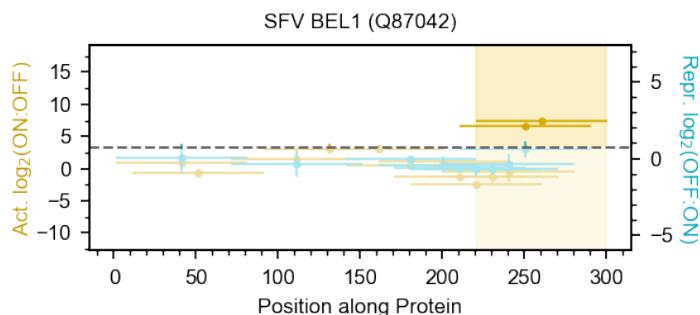
KHHKPRQKRPRRRSIDNESCASSDTMANEPGSLCTNPLWNPGPLLSQLLEESSNLNLEVHMSGGPFWEEVYGD SILGPPSGSGEHSV L

Max tile of repression domain from residues 211 to 290 (estimated 32.4% to 34.1% of cells repressed):

KHHKPRQKRPRRRSIDNESCASSDTMANEPGSLCTNPLWNPGPLLSQLLEESSNLNLEVHMSGGPFWEEVYGD SILGP

SFV BEL1 (Q87042)

Gene: BEL1 ; Protein Family: BEL1



Extended activation domain from residues 211 to 300:

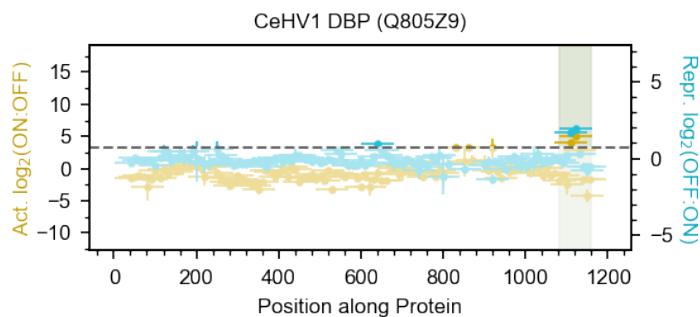
KHHKPRPKRSRKRSIDHESCASSGDTVANESGPLCTNTFWTPGPVLQGLLGESSNLPDLEVHMSGGPFWKEVYGDSILGPPSGSGEHSVVL

Max tile of activation domain from residues 221 to 300 (estimated 72.9% to 81.1% of cells activated):

RKRSIDHESCASSGDTVANESGPLCTNTFWTPGPVLQGLLGESSNLPDLEVHMSGGPFWKEVYGDSILGPPSGSGEHSVVL

CeHV1 DBP (Q805Z9)

Gene: UL29 ; Protein Family: DBP



Extended activation domain from residues 1071 to 1160:

VAAVKSLGNRTPQLQIEDWLALLEDEYLSEEMMAFTARALERGGGEWAAEAAALEVAHEAEALVTQTGGADGGEVFDFGAFGVDDDEVPSF

Max tile of activation domain from residues 1081 to 1160 (estimated 35.6% to 40.5% of cells activated):

TPQLQIEDWLALLEDEYLSEEMMAFTARALERGGGEWAAEAALEVAHEAEALVTQTGGADGGEVFDFGAFGVDDDEVPSF

Extended repression domain from residues 1071 to 1160:

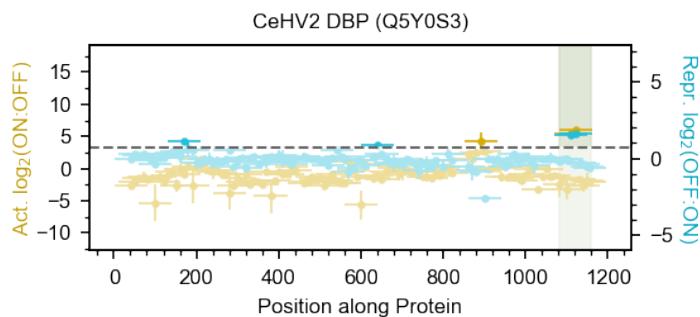
VAAVKSLGNRTPQLQIEDWLALLEDEYLSEEMMAFTARALERGGGEWAAEAALEVAHEAEALVTQTGGADGGEVFDFGAFGVDDDEVPSF

Max tile of repression domain from residues 1081 to 1160 (estimated 36.2% to 37.5% of cells repressed):

TPQLQIEDWLALLEDEYLSEEMMAFTARALERGGGEWAAEAALEVAHEAEALVTQTGGADGGEVFDFGAFGVDDDEVPSF

CeHV2 DBP (Q5Y0S3)

Gene: UL29 ; Protein Family: DBP



Extended activation domain from residues 1071 to 1160:

VAAVKSLGNRTPQLQIEDWLALLEDEYLGEEMMAFTARALERGGGEWTTEAALEVAHEAEALVTQTGGADVGEAFDFGAFGAEDDDAPTF

Max tile of activation domain from residues 1081 to 1160 (estimated 51.3% to 58.3% of cells activated):

TPQLQIEDWLALLEDEYLGEEMMAFTARALERGGGEWTTEAALEVAHEAEALVTQTGGADVGEAFDFGAFGAEDDDAPTF

Extended repression domain from residues 1071 to 1160:

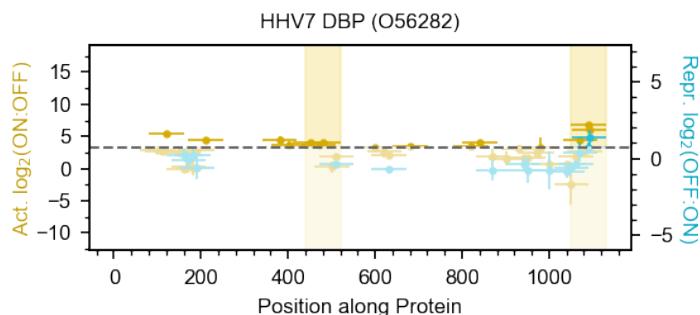
VAAVKSLGNRTPQLQIEDWLALLEDEYLGEEMMAFTARALERGGGEWTTEAALEVAHEAEALVTQTGGADVGEAFDFGAFGAEDDDAPTF

Max tile of repression domain from residues 1081 to 1160 (estimated 29.2% to 29.6% of cells repressed):

TPQLQIEDWLALLEDEYLGEEMMAFTARALERGGGEWTTEAALEVAHEAEALVTQTGGADVGEAFDFGAFGAEDDDAPTF

HHV7 DBP (O56282)

Gene: U41 ; Protein Family: DBP



Extended activation domain from residues 1051 to 1131:

DGREPLAKSVMNKIQHLTDLNHDFSLSTLLSVFEEQVEDSAIYDFSELLVEGNEQGFGILKCEETEHENEELPSLKKARL

Max tile of activation domain from residues 1051 to 1130 (estimated 65.9% to 73.2% of cells activated):

DGREPLAKSVMNKIQHLTDLNHDFSLSTLLSVFEEQVEDSAIYDFSELLVEGNEQGFGILKCEETEHENEELPSLKKAR

Extended activation domain from residues 431 to 520:

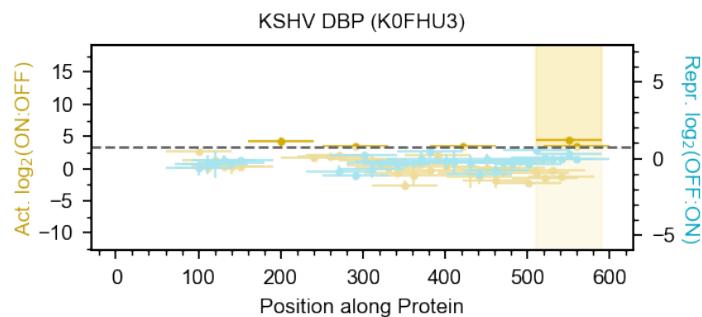
SHIIWNLRMSIYNTNCGNSEIYNHIVNCSSNLCEFCEGKCCHSCIGTALIRINSRLPQISKTTKKEPIVMTMFSRFYADVDTVLSFGKK

Max tile of activation domain from residues 441 to 520 (estimated 21.0% to 24.3% of cells activated):

SIYNTNCGNSEIYNHIVNCSSNLCEFCEGKCCHSCIGTALIRINSRLPQISKTTKKEPIVMTMFSRFYADVDTVLSFGKK

KSHV DBP (K0FHU3)

Gene: ORF6 ; Protein Family: DBP



Extended activation domain from residues 511 to 598:

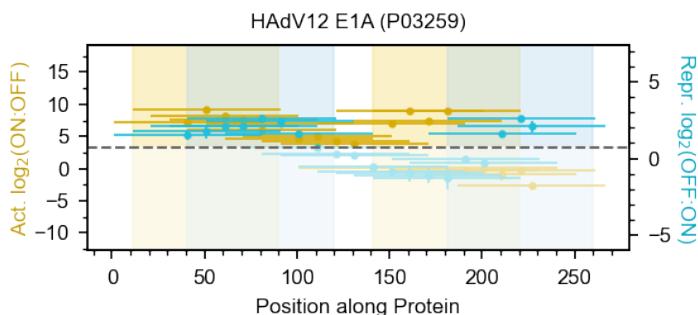
GPYAVLGDEVLSLLSTVGQAGVPWTAEGVASVIQDIIDDCELFVGPEEPCLIQQGSVVEELFPSPGVPSLTVGKKRKIASLLSDL

Max tile of activation domain from residues 511 to 590 (estimated 21.9% to 33.4% of cells activated):

GPYAVLGDEVLSLLSTVGQAGVPWTAEGVASVIQDIIDDCELFVGPEEPCLIQQGSVVEELFPSPGVPSLTVGKKRKIA

## HAdV12 E1A (P03259)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 1 to 170:

MRTEMTPVLVLSYQEADDILEHLVDNFFNEVPSDDLYVPSLYELYDLDVESAGEDNNNEQAVNEFFPESLILAASEGLFLPEPPVLSHVCEPIGGECPQLHPEDMDLLCYEMGFPCSDSEDEQDENGMASASAAAAADREREEFQLDHPELPGHNCKSCEHHRNSTGNTDLMCSLCYLRAYNMFIYSPVSDNEPEPNSTLDGDERPSPPKLGSAVPE

Max tile of activation domain from residues 11 to 90 (estimated 90.9% to 92.0% of cells activated):

SYQEADDILEHLVDNFFNEVPSDDLYVPSLYELYDLDVESAGEDNNNEQAVNEFFPESLILAASEGLFLPEPPVLSHVCE

Extended activation domain from residues 111 to 220:

EMGFPCSDSEDEQDENGMASASAAAAADREREEFQLDHPELPGHNCKSCEHHRNSTGNTDLMCSLCYLRAYNMFIYSPVSDNEPEPNSTLDGDERPSPPKLGSAVPE

Max tile of activation domain from residues 141 to 220 (estimated 88.3% to 92.2% of cells activated):

DREREEFQLDHPELPGHNCKSCEHHRNSTGNTDLMCSLCYLRAYNMFIYSPVSDNEPEPNSTLDGDERPSPPKLGSAVPE

Extended repression domain from residues 1 to 150:

MRTEMTPVLVLSYQEADDILEHLVDNFFNEVPSDDLYVPSLYELYDLDVESAGEDNNNEQAVNEFFPESLILAASEGLFLPEPPVLSHVCEPIGGECPQLHPEDMDLLCYEMGFPCSDSEDEQDENGMASASAAAAADREREEFQLD

Max tile of repression domain from residues 41 to 120 (estimated 47.9% to 66.3% of cells repressed):

LYELYDLDVESAGEDNNNEQAVNEFFPESLILAASEGLFLPEPPVLSHVCEPIGGECPQLHPEDMDLLCYEMGFPCSDSE

Extended repression domain from residues 171 to 266:

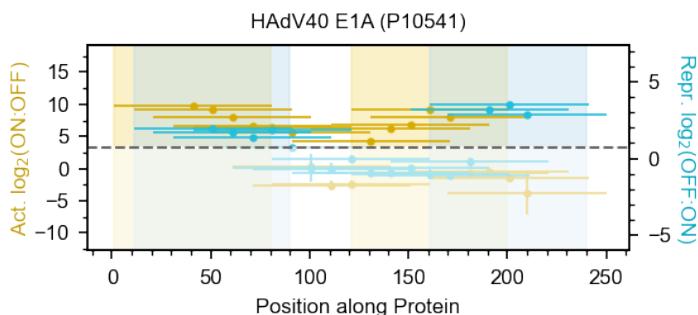
NTDLMCSLCYLRAYNMFIYSPVSDNEPEPNSTLDGDERPSPPKLGSAVPEGVIKPVPQRVTGRRCAVESILDLIQEEEREQTVPVDSLVRPRCN

Max tile of repression domain from residues 181 to 260 (estimated 52.8% to 61.0% of cells repressed):

LRAYNMFIYSPVSDNEPEPNSTLDGDERPSPPKLGSAVPEGVIKPVPQRVTGRRCAVESILDLIQEEEREQTVPVDSL

## HAdV40 E1A (P10541)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 1 to 130:

MRMLPDFFTGNWDDMFQGLLETEYVFDFPEPSEASEEEMSLHDLFDVEVDGFEEDANQEAVDGMFPERLLSEAESAESGSGDSGVGEELLPVDLDLK  
CYEDGLPPSDPETDEATEAEAAAAMPTYVNENE

Max tile of activation domain from residues 1 to 80 (estimated 93.3% to 93.7% of cells activated):

MRMLPDFFTGNWDDMFQGLLETEYVFDFPEPSEASEEEMSLHDLFDVEVDGFEEDANQEAVDGMFPERLLSEAESAESGS

Extended activation domain from residues 91 to 210:

PVLDLKYEDGLPPSDPETDEATEAEAAAAMPTYVNENENELVLDCPENPGRGCRACDFHRGTSGNPEAMCALCYMRLTGHCYSPISDAEGESES  
GSPEDTDFPHPLTATPPHGIVRT

Max tile of activation domain from residues 121 to 200 (estimated 91.3% to 91.8% of cells activated):

AMPTYVNENENELVLDCPENPGRGCRACDFHRGTSGNPEAMCALCYMRLTGHCYSPISDAEGESES  
GSPEDTDFPHPLT

Extended repression domain from residues 151 to 249:

HRGTSGNPEAMCALCYMRLTGHCYSPISDAEGESES  
GSPEDTDFPHPLTATPPHGIVRTIPCRVSCRRPAVECIEDLLEEDPTDEPLNLSLRPKCS

Max tile of repression domain from residues 161 to 240 (estimated 81.9% to 86.1% of cells repressed):

MCALCYMRLTGHCYSPISDAEGESES  
GSPEDTDFPHPLTATPPHGIVRTIPCRVSCRRPAVECIEDLLEEDPTDEPLN

Extended repression domain from residues 11 to 120:

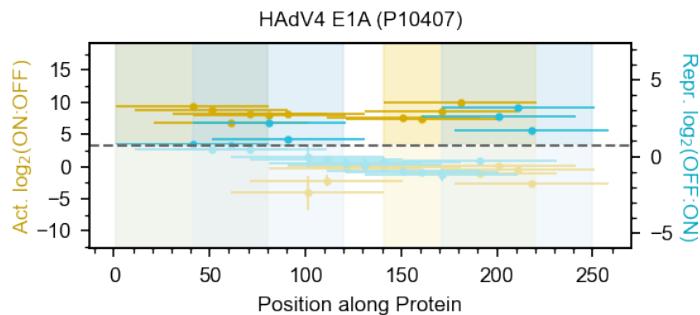
NWDDMFQGLLETEYVFDFPEPSEASEEEMSLHDLFDVEVDGFEEDANQEAVDGMFPERLLSEAESAESGSGDSGVGEELLPVDLDLK  
CYEDGLPPSDPETDEATEAEAAA

Max tile of repression domain from residues 11 to 90 (estimated 35.8% to 39.2% of cells repressed):

NWDDMFQGLLETEYVFDFPEPSEASEEEMSLHDLFDVEVDGFEEDANQEAVDGMFPERLLSEAESAESGSGDSGVGEELL

## HAdV4 E1A (P10407)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 111 to 220:

MDLRCYEECLPPSDDDEEQAIQNAASHGVQAVSESFALDCPPLPGHGCKSCEFHRINTGDKAVLCALCYMRAYNHCVYSPVSDADDETPTTESTLSPP  
EIGTSPSDNIVR

Max tile of activation domain from residues 141 to 220 (estimated 92.0% to 94.8% of cells activated):

AVSESFALDCPPLPGHGCKSCEFHRINTGDKAVLCALCYMRAYNHCVYSPVSDADDETPTTESTLSPEIGTSPSDNIVR

Extended activation domain from residues 1 to 130:

MRHLRDLPDEEIIIASGSEILELVVNATMGDDHPEPPTPGTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEASSPSSSDSSLHTPRHDRGEK  
EIPGLKWEKMDLRCYEECLPPSDDDEQEA

Max tile of activation domain from residues 1 to 80 (estimated 91.8% to 92.5% of cells activated):

MRHLRDLPDEEIIIASGSEILELVVNATMGDDHPEPPTPGTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEAA

Extended repression domain from residues 161 to 257:

CEFHINTGDKAVLCALCYMRAYNHCVYSPVSDADDETPTTESTLSPEIGTSPSDNIVRPVPVRATGRRAAVECLDDLLQGGDEPLDLCTRKRPRH

Max tile of repression domain from residues 171 to 250 (estimated 71.1% to 79.1% of cells repressed):

KAVLCALCYMRAYNHCVYSPVSDADDETPTTESTLSPEIGTSPSDNIVRPVPVRATGRRAAVECLDDLLQGGDEPLDL

Extended repression domain from residues 41 to 130:

GTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEASSPSSSDSSLHTPRHDRGEKEIPGLKWEKMDLRCYEECLPPSDDDEQEA

Max tile of repression domain from residues 41 to 120 (estimated 41.2% to 45.1% of cells repressed):

GTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEASSPSSSDSSLHTPRHDRGEKEIPGLKWEKMDLRCYEECL

Extended repression domain from residues 1 to 80:

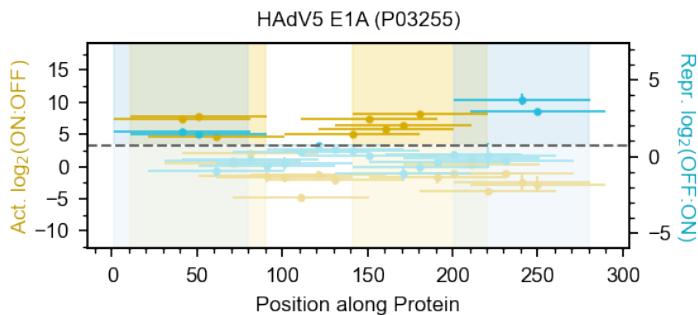
MRHLRDLPDEEIIIASGSEILELVVNATMGDDHPEPPTPGTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEAA

Max tile of repression domain from residues 1 to 80 (estimated 17.9% to 20.0% of cells repressed):

MRHLRDLPDEEIIIASGSEILELVVNATMGDDHPEPPTPGTPSLHDLYDLEVDVPEDDPNEKAVNDLFSDAALLAAEAA

## HAdV5 E1A (P03255)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 101 to 220:

QPEQRALGPVSMMPNLVPEVIDLTCHAGFPPSDDEEEGEEFVLDYVEHPGHGCRSCHYHRRNTGDPDIMCSLCYMTGCMFVYSPVSEPEPEPEPEPEPARPTRLRKMAPAILRRPTSP

Max tile of activation domain from residues 141 to 220 (estimated 85.9% to 86.5% of cells activated):

EFVLDYVEHPGHGCRSCHYHRRNTGDPDIMCSLCYMTGCMFVYSPVSEPEPEPEPARPTRLRKMAPAILRRPTSP

Extended activation domain from residues 1 to 100:

MRHIICHGGVITEEMAASLLDQLIEEVVLADNLPPPSHFEPPTLHELYDLDVTAPEDPNEEAVSQIFPDSVMLAVQEGIDLTLFPPAPGSPEPPHLSRQPE

Max tile of activation domain from residues 11 to 90 (estimated 81.3% to 84.4% of cells activated):

ITEEMAASLLDQLIEEVVLADNLPPPSHFEPPTLHELYDLDVTAPEDPNEEAVSQIFPDSVMLAVQEGIDLTLFPPAPGSPEPPHLSRQPE

Extended repression domain from residues 201 to 289:

ARPTRRPKMAPAILRRPTSPVSRECNSSTDSCDSGPSNTPPEIHPVVPLCPIKPVAVRGGRQAECIEDLLNEPGQPLDLSCRPRP

Max tile of repression domain from residues 201 to 280 (estimated 78.9% to 92.7% of cells repressed):

ARPTRRPKMAPAILRRPTSPVSRECNSSTDSCDSGPSNTPPEIHPVVPLCPIKPVAVRGGRQAECIEDLLNEPGQPL

Extended repression domain from residues 1 to 90:

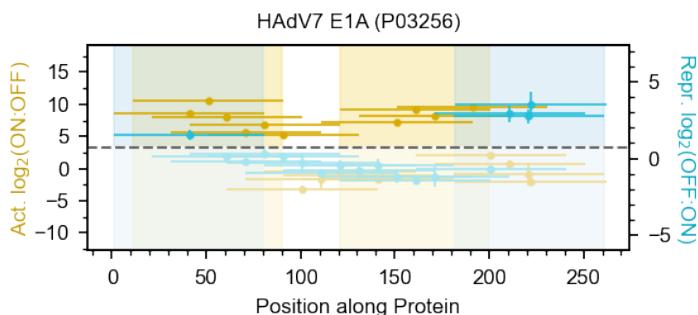
MRHIICHGGVITEEMAASLLDQLIEEVVLADNLPPPSHFEPPTLHELYDLDVTAPEDPNEEAVSQIFPDSVMLAVQEGIDLTLFPPAPGSPEPPHLSRQPE

Max tile of repression domain from residues 1 to 80 (estimated 26.2% to 32.5% of cells repressed):

MRHIICHGGVITEEMAASLLDQLIEEVVLADNLPPPSHFEPPTLHELYDLDVTAPEDPNEEAVSQIFPDSVMLAVQEGIDL

## HAdV7 E1A (P03256)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 1 to 130:

MRHLRFLPQEIISETGIEILEFVVNTLMGDDPEPPVQPFDPPTLHDLYDLEV DGPEDPNEGA VNGFFTDSM LLADEGL DINPPPETLVTPGVVVESGRG  
GKKLPDLGAAEMDLRCYEEGFPPS DDEDG

Max tile of activation domain from residues 11 to 90 (estimated 94.1% to 95.6% of cells activated):

IISSETGIEILEFVVNTLMGDDPEPPVQPFDPPTLHDLYDLEV DGPEDPNEGA VNGFFTDSM LLADEGL DINPPPETLV

Extended activation domain from residues 111 to 210:

AEMDLRCYEEGFPPS DDEDGETEQS IHTAVNEG VKAASDVFKLDCPELPGH GCKSCEFH RNNNTGMKELLCSLCYMRMHCHFIYSPVSDDES PPDSTT SP

Max tile of activation domain from residues 121 to 200 (estimated 90.4% to 92.3% of cells activated):

GFPPS DDEDGETEQS IHTAVNEG VKAASDVFKLDCPELPGH GCKSCEFH RNNNTGMKELLCSLCYMRMHCHFIYSPVSDDE

Extended repression domain from residues 171 to 261:

NN TGMKELLCSLCYMRMHCHFIYSPVSDDES PPDSTTSPPEI QAPAPANVCKPIPVKPKPGKRPAVDKLEDLLEGGDGPLDLSTRKLPRQ

Max tile of repression domain from residues 182 to 261 (estimated 62.3% to 95.3% of cells repressed):

LCYMRMHCHFIYSPVSDDES PPDSTTSPPEI QAPAPANVCKPIPVKPKPGKRPAVDKLEDLLEGGDGPLDLSTRKLPRQ

Extended repression domain from residues 1 to 80:

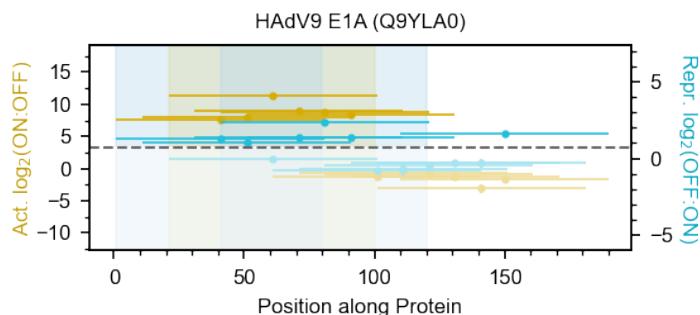
MRHLRFLPQEIISETGIEILEFVVNTLMGDDPEPPVQPFDPPTLHDLYDLEV DGPEDPNEGA VNGFFTDSM LLADEGL

Max tile of repression domain from residues 1 to 80 (estimated 22.6% to 35.6% of cells repressed):

MRHLRFLPQEIISETGIEILEFVVNTLMGDDPEPPVQPFDPPTLHDLYDLEV DGPEDPNEGA VNGFFTDSM LLADEGL

## HAdV9 E1A (Q9YLA0)

Gene: E1A ; Protein Family: E1A



Extended activation domain from residues 1 to 130:

MRHLRLLPSTVPGELAVLMLEDFVDTLEDELHPSPFELGPTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANESTPLHTPTLSPIELEEEDELD  
LRCYEEGFPPSDSEDERGPVSEDELSPS

Max tile of activation domain from residues 21 to 100 (estimated 95.4% to 96.0% of cells activated):

EDFVDTVLEDELHPSPFELGPTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANESTPLHTPTLSPIELEEEDE

Extended repression domain from residues 31 to 130:

ELHPSPFELGPTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANESTPLHTPTLSPIELEEEDELDLRCYEEGFPPSDSEDERGPVSEDELSPS

Max tile of repression domain from residues 41 to 120 (estimated 43.4% to 55.2% of cells repressed):

PTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANESTPLHTPTLSPIELEEEDELDLRCYEEGFPPSDSEDERG

Extended repression domain from residues 1 to 90:

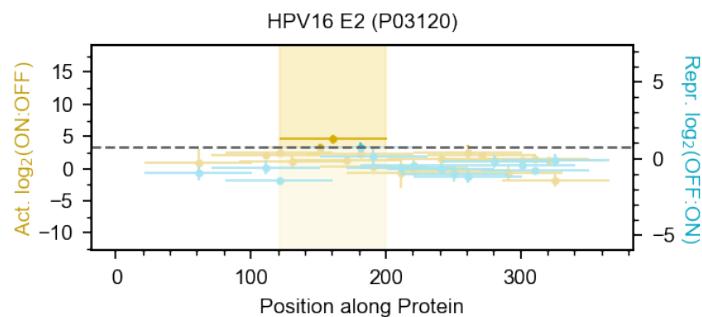
MRHLRLLPSTVPGELAVLMLEDFVDTLEDELHPSPFELGPTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANESTPLHTPTLS

Max tile of repression domain from residues 1 to 80 (estimated 22.5% to 24.7% of cells repressed):

MRHLRLLPSTVPGELAVLMLEDFVDTLEDELHPSPFELGPTLQDLYDLEVDAHDDDPNEEAVNLIFPESMILQADIANE

HPV16 E2 (P03120)

Gene: E2 ; Protein Family: E2



Extended activation domain from residues 111 to 200:

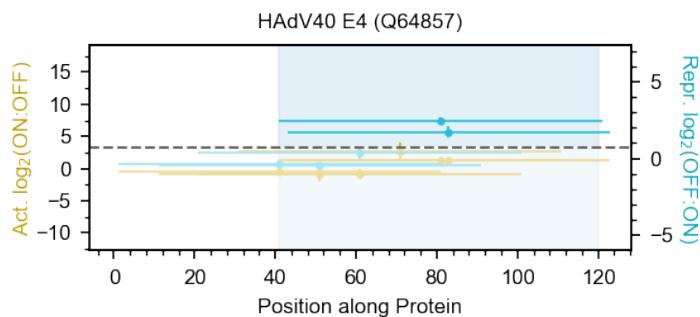
KKHGYTVEVQFDGDICNTMHYTNWTHIYICEEASVTVEGQVDYYGLYYVHEGIRTYFVQFKDDAEKYSKNKVWEVHAGGQVILCPTSVF

Max tile of activation domain from residues 121 to 200 (estimated 21.0% to 43.5% of cells activated):

FDGDICNTMHYTNWTHIYICEEASVTVEGQVDYYGLYYVHEGIRTYFVQFKDDAEKYSKNKVWEVHAGGQVILCPTSVF

HAdV40 E4 (Q64857)

Gene: E4 ; Protein Family: E4



Extended repression domain from residues 41 to 122:

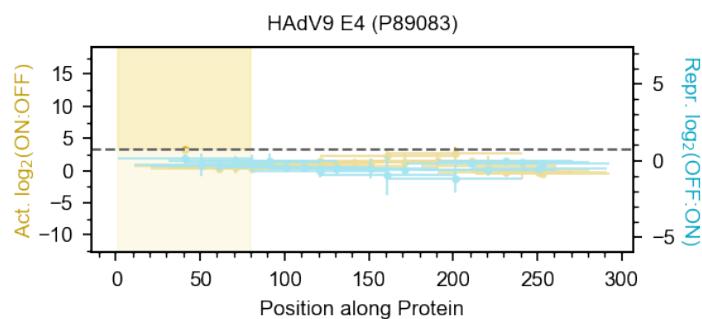
ECEHLNMHYSSALDSTVLLDDVSEGFISITDQRFASKEPVLI LSQKNRCVNPKLQLFAVVQGEREVYKVWKGGGRLTVIL

Max tile of repression domain from residues 41 to 120 (estimated 44.1% to 59.8% of cells repressed):

ECEHLNMHYSSALDSTVLLDDVSEGFISITDQRFASKEPVLI LSQKNRCVNPKLQLFAVVQGEREVYKVWKGGGRLTVR

HAdV9 E4 (P89083)

Gene: E4 ; Protein Family: E4



Extended activation domain from residues 1 to 80:

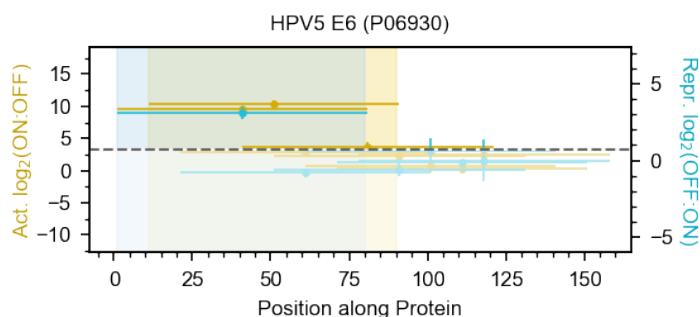
MQTEIQSSLRHHPYRRARLPRSDEETRASLTEQHPLLPDCDHADYHNSSVRGLPCAAGFTLLQEFPVPWDMILTPPEI

Max tile of activation domain from residues 1 to 80 (estimated 13.9% to 15.8% of cells activated):

MQTEIQSSLRHHPYRRARLPRSDEETRASLTEQHPLLPDCDHADYHNSSVRGLPCAAGFTLLQEFPVPWDMILTPPEI

HPV5 E6 (P06930)

Gene: E6 ; Protein Family: E6



Extended activation domain from residues 1 to 90:

MAEGAEHQQLTEKDKAELPLSIRDLAEALGIPVIDCLIPCNFCGNFLNYLEACEFDYKRLSLIWKDYCVFACCRVCCGATATYEFNQFY

Max tile of activation domain from residues 11 to 90 (estimated 93.4% to 95.6% of cells activated):

LTEKDKAELPLSIRDLAEALGIPVIDCLIPCNFCGNFLNYLEACEFDYKRLSLIWKDYCVFACCRVCCGATATYEFNQFY

Extended repression domain from residues 1 to 80:

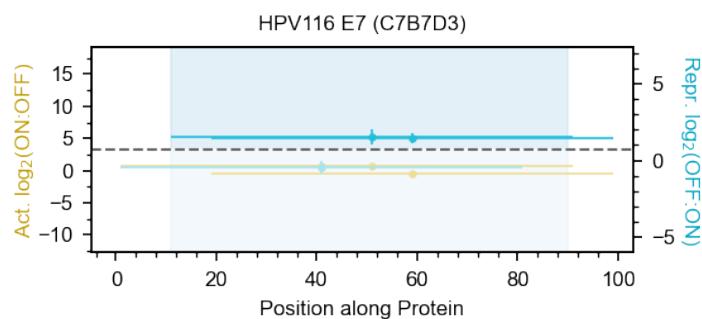
MAEGAEHQQLTEKDKAELPLSIRDLAEALGIPVIDCLIPCNFCGNFLNYLEACEFDYKRLSLIWKDYCVFACCRVCCGA

Max tile of repression domain from residues 1 to 80 (estimated 59.5% to 83.1% of cells repressed):

MAEGAEHQQLTEKDKAELPLSIRDLAEALGIPVIDCLIPCNFCGNFLNYLEACEFDYKRLSLIWKDYCVFACCRVCCGA

HPV116 E7 (C7B7D3)

Gene: E7 ; Protein Family: E7



Extended repression domain from residues 11 to 98:

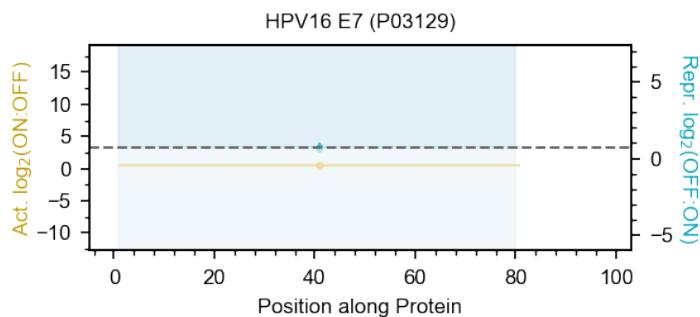
VELHHEELVIPANLLSDESLDETPEEEQLSPYRVDSLCTRCNKCIRISVVCTTGAIYTL

Max tile of repression domain from residues 11 to 90 (estimated 21.1% to 38.3% of cells repressed):

VELHHEELVIPANLLSDESLDETPEEEQLSPYRVDSLCTRCNKCIRISVVCTTGAIYTL

HPV16 E7 (P03129)

Gene: E7 ; Protein Family: E7



Extended repression domain from residues 1 to 80:

MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEDEIDGPAGQAEPDRAHYNIVTFCCKCDSTRLCVQSTHVDIRTLE

Max tile of repression domain from residues 1 to 80 (estimated 16.4% to 21.0% of cells repressed):

MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEDEIDGPAGQAEPDRAHYNIVTFCCKCDSTRLCVQSTHVDIRTLE

Extended repression domain from residues 1 to 80:

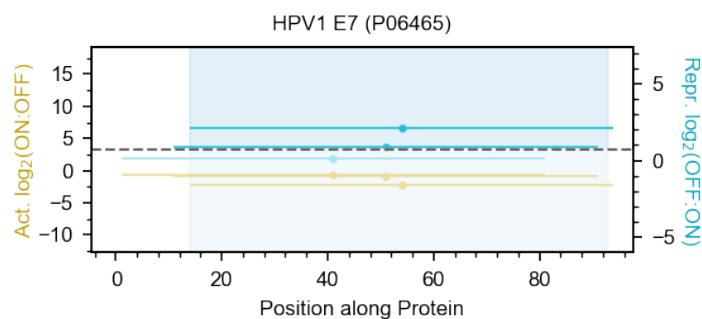
MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEDEIDGPAGQAEPDRAHYNIVTFCCKCDSTRLCVQSTHVDIRTLE

Max tile of repression domain from residues 1 to 80 (estimated 16.4% to 21.0% of cells repressed):

MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEDEIDGPAGQAEPDRAHYNIVTFCCKCDSTRLCVQSTHVDIRTLE

HPV1 E7 (P06465)

Gene: E7 ; Protein Family: E7



Extended repression domain from residues 11 to 93:

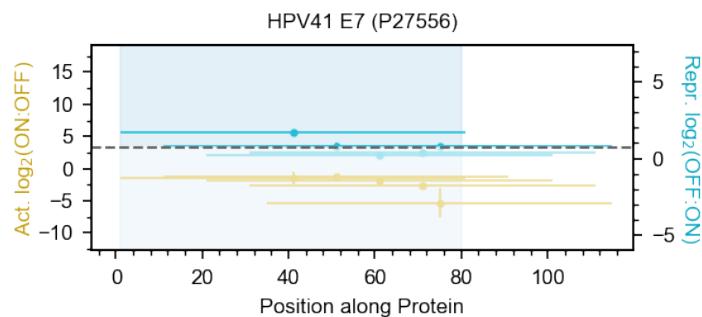
LVLQLEPSVLDDLYCYEEVPPDDIEELVSPQQPYAVVASCAYCEKLVRLTVLADHSAIRQLEELLLRSLNIVCPLCTLQRQ

Max tile of repression domain from residues 14 to 93 (estimated 39.2% to 42.5% of cells repressed):

QLEPSVLDDLYCYEEVPPDDIEELVSPQQPYAVVASCAYCEKLVRLTVLADHSAIRQLEELLLRSLNIVCPLCTLQRQ

HPV41 E7 (P27556)

Gene: E7 ; Protein Family: E7



Extended repression domain from residues 1 to 90:

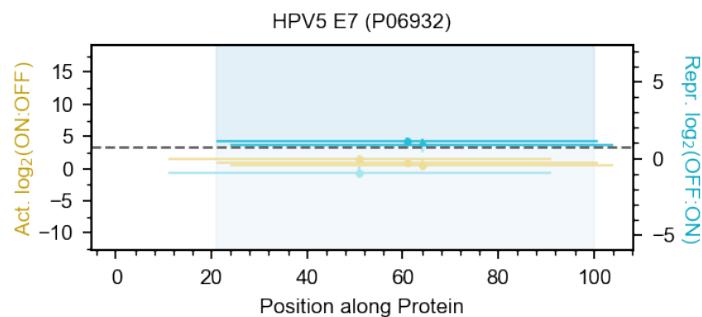
MRGNSVDLQEIVLVQQGEVPENAAVHSGEHSDDEGESEEEEREQVQQVPTPRRTLVLVESQCPFCQAIIRFVCVASNTGIRNLQALLVNS

Max tile of repression domain from residues 1 to 80 (estimated 28.5% to 35.2% of cells repressed):

MRGNSVDLQEIVLVQQGEVPENAAVHSGEHSDDEGESEEEEREQVQQVPTPRRTLVLVESQCPFCQAIIRFVCVASNTGI

HPV5 E7 (P06932)

Gene: E7 ; Protein Family: E7



Extended repression domain from residues 21 to 103:

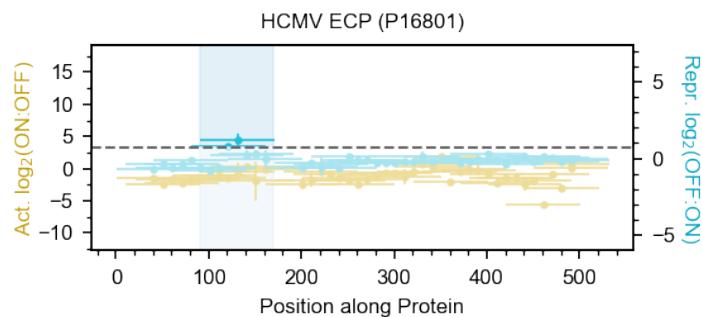
EVLPVDLFCEEELPNEQETEEEPDNERISYKVIAPCGCRNCEVKLRIFVHATEFGIRAFQQLLTGDLQLLCPDCRGNCKHDGS

Max tile of repression domain from residues 21 to 100 (estimated 20.2% to 24.5% of cells repressed):

EVLPVDLFCEEELPNEQETEEEPDNERISYKVIAPCGCRNCEVKLRIFVHATEFGIRAFQQLLTGDLQLLCPDCRGNCKH

HCMV ECP (P16801)

Gene: UL95 ; Protein Family: ECP



Extended repression domain from residues 81 to 170:

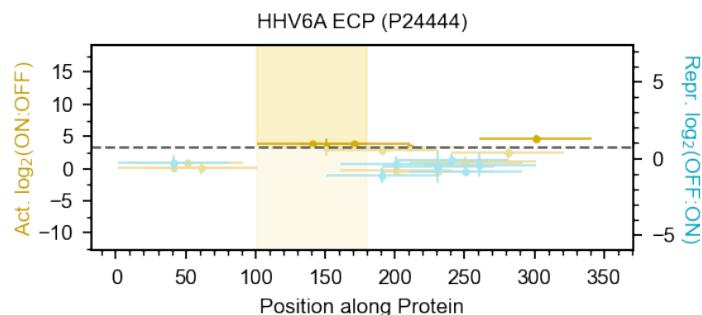
PSTAVRSPGSAGVSTSLCSVERMVELSAQSPAADFSVSEAWRFEEAVNMALVACEAVSPYDRFRLIETPDENFLVTNVIPRESAEVPVL

Max tile of repression domain from residues 91 to 170 (estimated 19.2% to 28.6% of cells repressed):

AGVSTSLCSVERMVELSAQSPAADFSVSEAWRFEEAVNMALVACEAVSPYDRFRLIETPDENFLVTNVIPRESAEVPVL

HHV6A ECP (P24444)

Gene: U67 ; Protein Family: ECP



Extended activation domain from residues 101 to 190:

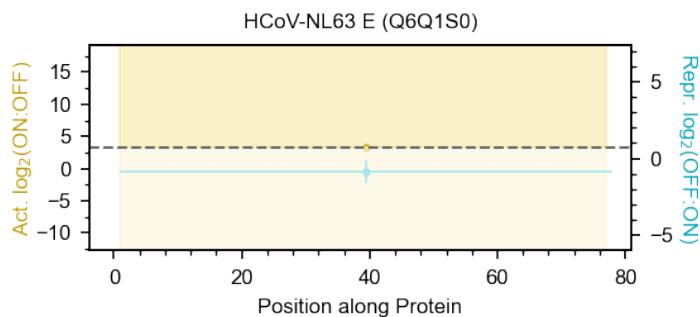
KSKKMARTYLLQNVLRTQDQQVAISGKYILYTKKHIETSLMIDKTKLVKKILEYAETPNLLGYTDVRDLECLLWLVFCGPKSFCQSDSCF

Max tile of activation domain from residues 101 to 180 (estimated 17.3% to 22.0% of cells activated):

KSKKMARTYLLQNVLRTQDQQVAISGKYILYTKKHIETSLMIDKTKLVKKILEYAETPNLLGYTDVRDLECLLWLVFCGP

HCoV-NL63 E (Q6Q1S0)

Gene: E ; Protein Family: E



---

Extended activation domain from residues 1 to 77:

MFLRLIDDNGIVLNSILWLLVMIFFFVLAMTFIKLIQLCFTCHYFFSRTLYQPVYKIFLAYQDYMQIAPVPAEVNV

Max tile of activation domain from residues 1 to 77 (estimated 9.2% to 21.4% of cells activated):

MFLRLIDDNGIVLNSILWLLVMIFFFVLAMTFIKLIQLCFTCHYFFSRTLYQPVYKIFLAYQDYMQIAPVPAEVNV

---

Extended activation domain from residues 1 to 77:

MFLRLIDDNGIVLNSILWLLVMIFFFVLAMTFIKLIQLCFTCHYFFSRTLYQPVYKIFLAYQDYMQIAPVPAEVNV

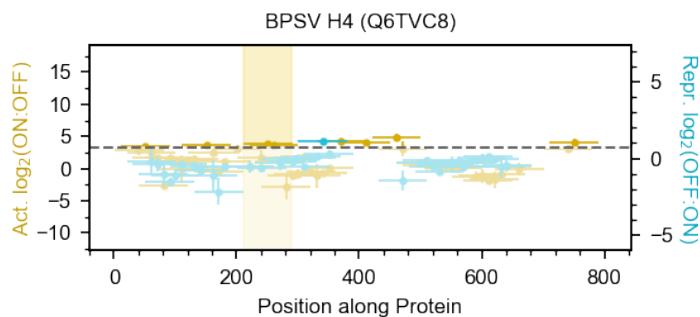
Max tile of activation domain from residues 1 to 77 (estimated 6.2% to 7.0% of cells activated):

MFLRLIDDNGIVLNSILWLLVMIFFFVLAMTFIKLIQLCFTCHYFFSRTLYQPVYKIFLAYQDYMQIAPVPAEVNV

---

BPSV H4 (Q6TVC8)

Gene: H4 ; Protein Family: H4



Extended activation domain from residues 211 to 300:

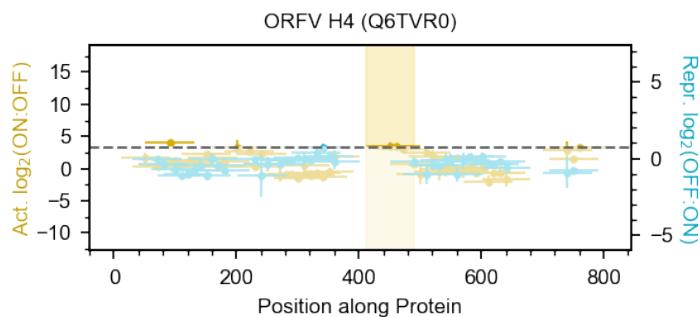
VFMYDLDGVRIPIVIRDFLDVKKVFLEATGKVYLNNFADDHPGIVEWGRAFDAMAHDERRLLYKYVFLSSRHLCMDFTDLLNPRNAKFR

Max tile of activation domain from residues 211 to 290 (estimated 16.6% to 22.3% of cells activated):

VFMYDLDGVRIPIVIRDFLDVKKVFLEATGKVYLNNFADDHPGIVEWGRAFDAMAHDERRLLYKYVFLSSRHLCMDFTD

ORFV H4 (Q6TVR0)

Gene: H4 ; Protein Family: H4



Extended activation domain from residues 411 to 500:

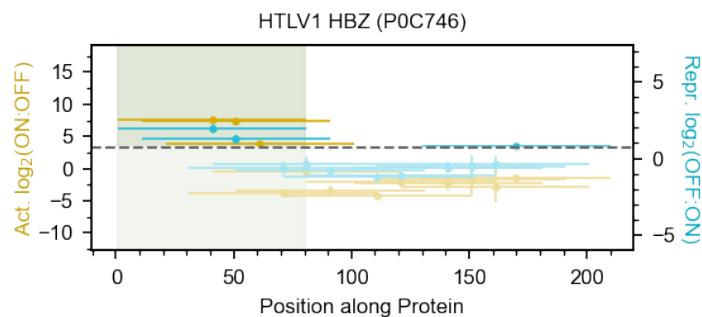
NIVMSFDTIMKTQTWAVKYNINRLILNFLAINARRQEYERRFAAEIKRGVFFLRLSANLLDVHASATELFQSAKTLNLNFIVALVIVLN

Max tile of activation domain from residues 411 to 490 (estimated 11.5% to 22.0% of cells activated):

NIVMSFDTIMKTQTWAVKYNINRLILNFLAINARRQEYERRFAAEIKRGVFFLRLSANLLDVHASATELFQSAKTLNLN

HTLV1 HBZ (P0C746)

Gene: HBZ ; Protein Family: HBZ



Extended activation domain from residues 1 to 100:

MVNFSAGLFRC~~L~~PVSCPEDLLVEELVDGLSLEEEELKDKEEEEAVLDGLSLEEEESRGRLRRGPPGEKAPPRGETHRDRQRAEKKRKKEREKEEE  
K

Max tile of activation domain from residues 1 to 80 (estimated 78.9% to 80.6% of cells activated):

MVNFSAGLFRC~~L~~PVSCPEDLLVEELVDGLSLEEEELKDKEEEEAVLDGLSLEEEESRGRLRRGPPGEKAPPRGETHRDR

Extended repression domain from residues 1 to 90:

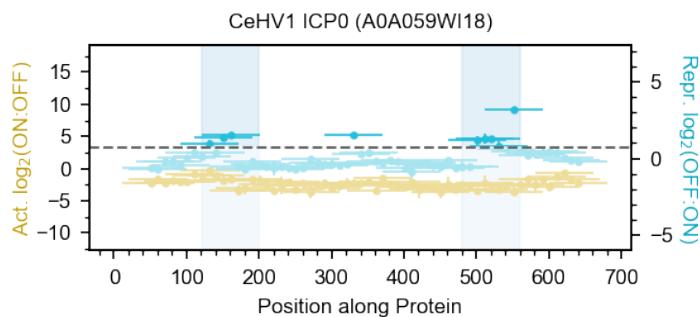
MVNFSAGLFRC~~L~~PVSCPEDLLVEELVDGLSLEEEELKDKEEEEAVLDGLSLEEEESRGRLRRGPPGEKAPPRGETHRDRQRAEKKRKR

Max tile of repression domain from residues 1 to 80 (estimated 31.3% to 44.1% of cells repressed):

MVNFSAGLFRC~~L~~PVSCPEDLLVEELVDGLSLEEEELKDKEEEEAVLDGLSLEEEESRGRLRRGPPGEKAPPRGETHRDR

CeHV1 ICP0 (A0A059WI18)

Gene: ICP0 ; Protein Family: ICP0



Extended repression domain from residues 111 to 200:

LKTWLPMRNSCPLCNAAVAYLIVGVQPNGSYSTIPVVNDPRTRLEAEDAVRAGTAVDFIWVDRPGQPAPPSTLGGRTVRALSPPARMGR

Max tile of repression domain from residues 121 to 200 (estimated 26.4% to 28.4% of cells repressed):

CPLCNAAVAYLIVGVQPNGSYSTIPVVNDPRTRLEAEDAVRAGTAVDFIWVDRPGQPAPPSTLGGRTVRALSPPARMGR

Extended repression domain from residues 461 to 570:

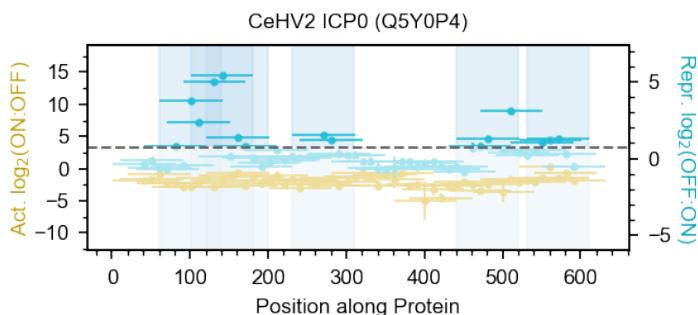
PHPRPAPARAPALAGAPPPRPLAAPAAPPPQAAPPPPAAPPPPVERDRSSLGPRPAEQGPRKCVRKTRHVDAECAPAALGPTRYLPVSGVSSVVALAPYLNKTVTGDD

Max tile of repression domain from residues 481 to 560 (estimated 22.7% to 25.9% of cells repressed):

RPLAAPAAPPPQAAPPPPAAPPPPVERDRSSLGPRPAEQGPRKCVRKTRHVDAECAPAALGPTRYLPVSGVSSVVALA

## CeHV2 ICP0 (Q5Y0P4)

Gene: RL2 ; Protein Family: ICP0



Extended repression domain from residues 91 to 180:

VCTERIDETQLCAAFCPLHRCIPCLKTWLPMRNSCPLCNAAVVAYLIVGVKPDGSYSTIPVINDPRTRAEEAVRAGTAVDFIWTWRPLP

Max tile of repression domain from residues 101 to 180 (estimated 99.9% to 100.1% of cells repressed):

LCAAFPCPLHRCIPCLKTWLPMRNSCPLCNAAVVAYLIVGVKPDGSYSTIPVINDPRTRAEEAVRAGTAVDFIWTWRPLP

Extended repression domain from residues 61 to 150:

DTDAELCEPGPASRGPRAPSPPPPREVCACVTERIDETQLCAAFCPLHRCIPCLKTWLPMRNSCPLCNAAVVAYLIVGVKPDGSYSTIP

Max tile of repression domain from residues 61 to 140 (estimated 85.5% to 90.1% of cells repressed):

DTDAELCEPGPASRGPRAPSPPPPREVCACVTERIDETQLCAAFCPLHRCIPCLKTWLPMRNSCPLCNAAVVAYLIVGV

Extended repression domain from residues 231 to 320:

DSPILIADSPPASPRRPPAVSGPPVAPVAPRPPRAAMPRPPAQARPPALTQAQAAQTQARSQARAQAAALAQALGRAPPRPAPPQHAHT

Max tile of repression domain from residues 231 to 310 (estimated 25.7% to 31.3% of cells repressed):

DSPILIADSPPASPRRPPAVSGPPVAPVAPRPPRAAMPRPPAQARPPALTQAQAAQTQARSQARAQAAALAQALGRAPP

Extended repression domain from residues 121 to 210:

PMRNSCPLCNAAVVAYLIVGVKPDGSYSTIPVINDPRTRAEEAVRAGTAVDFIWTWRPLGEAAPASVTGGRTVRALSPARMGQPAPR

Max tile of repression domain from residues 121 to 200 (estimated 24.8% to 25.1% of cells repressed):

PMRNSCPLCNAAVVAYLIVGVKPDGSYSTIPVINDPRTRAEEAVRAGTAVDFIWTWRPLGEAAPASVTGGRTVRALSP

Extended repression domain from residues 511 to 610:

SGVSSVVAMAPYLNKTVGDCLPVLDMETGAIGAYVVLVGRDCNLARCLADAEPQWARRSRRLPEAAPGCVSPPEYPGDPAHGLWMTPVGMLFEQG  
ALLG

Max tile of repression domain from residues 531 to 610 (estimated 21.7% to 26.4% of cells repressed):

CLPVLDMETGAIGAYVVLVGRDCNLARCLADAEPQWARRSRRLPEAAPGCVSPPEYPGDPAHGLWMTPVGMLFEQGALLG

Extended repression domain from residues 421 to 520:

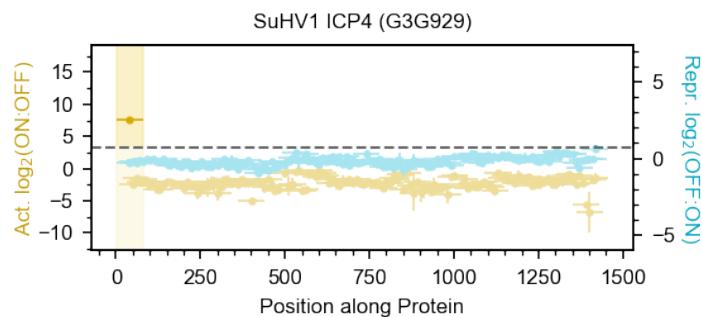
PARPAQLPPAPPLAAAAPPPAPPPPAPASSAPRGSAAPPPAAPPAERAHGSSLGPRPAERGPRKCARKTHHDADRAPAASGPTRYLPISGVSSVVA  
MA

Max tile of repression domain from residues 441 to 520 (estimated 22.0% to 24.9% of cells repressed):

APPPPAPASSAPRGSAAPPPAAPPAERAHGSSLGPRPAERGPRKCARKTHHDADRAPAASGPTRYLPISGVSSVAMA

SuHV1 ICP4 (G3G929)

Gene: ICP4 ; Protein Family: ICP4



Extended activation domain from residues 1 to 80:

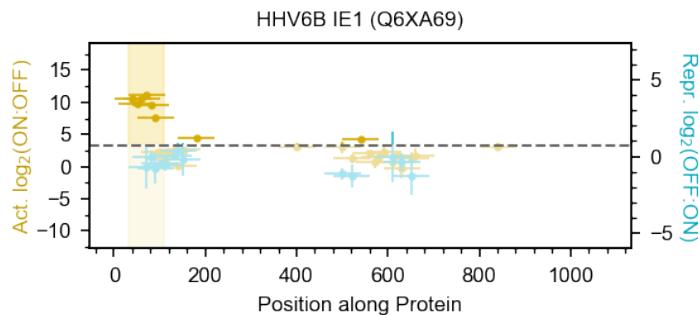
MADDLFDIETEGNFSQLAAAAAAAAAEEEGIASGPDGGSQGSRRRGSSGEDLLFGPGGLFSDDAAEAEAAVLAAAAGA

Max tile of activation domain from residues 1 to 80 (estimated 77.7% to 83.1% of cells activated):

MADDLFDIETEGNFSQLAAAAAAAAAEEEGIASGPDGGSQGSRRRGSSGEDLLFGPGGLFSDDAAEAEAAVLAAAAGA

HHV6B IE1 (Q6XA69)

Gene: U90 ; Protein Family: IE



Extended activation domain from residues 1 to 130:

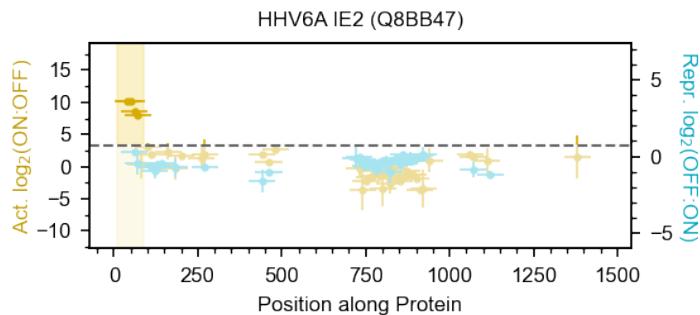
MESAKDTTSNSMFILEGKPGNNMESNEERMQNYHPDPVVEESIKEILEESLKCDVSFESLLFPELEAFDLFIPESSNDIASKNVSYSSNVEEGASEEFKALVAQSVGNCIQSIGASVKAAMKQEQLSNMED

Max tile of activation domain from residues 31 to 110 (estimated 95.3% to 95.9% of cells activated):

QNYHPDPVVEESIKEILEESLKCDVSFESLLFPELEAFDLFIPESSNDIASKNVSYSSNVEEGASEEFKALVAQSVGNCI

HHV6A IE2 (Q8BB47)

Gene: U90/U86 ; Protein Family: IE



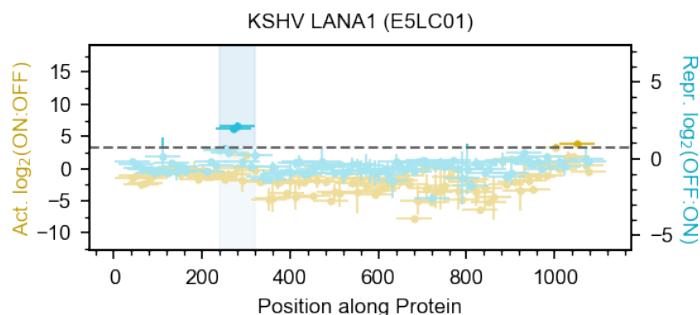
Extended activation domain from residues 1 to 110:

MEPAKPSGNMGSNDERMQDYRPDPMMEESIQQILEDSLMCDTSFDDLILPGLESFGLIPESSNNIESNNVEEGSNEDLKTLAEHKCKQGNDNDVIQSA  
MKLSGLYCD

Max tile of activation domain from residues 11 to 90 (estimated 94.2% to 94.3% of cells activated):

MGSNDERMQDYRPDPMMEESIQQILEDSLMCDTSFDDLILPGLESFGLIPESSNNIESNNVEEGSNEDLKTLAEHKCKQ

KSHV LANA1 (E5LC01)  
Gene: ORF73 ; Protein Family: LANA1



Extended repression domain from residues 231 to 320:

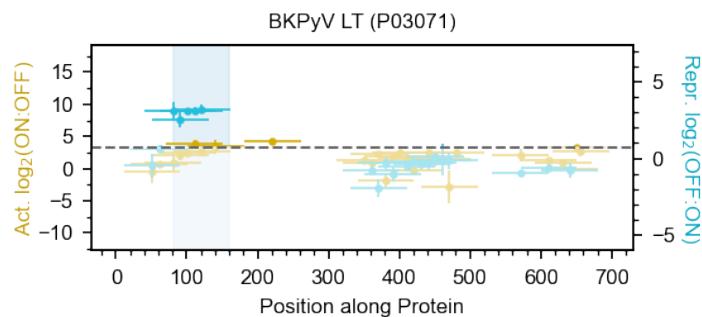
NRSVYPPWATESPIYVGSSSDGDTTPRQPPTSPISIGSSSPSEGSWGDDTAMLVLLAEIAEEASKNEKECSENNQAGEDNGDNEISKESQ

Max tile of repression domain from residues 241 to 320 (estimated 36.2% to 48.7% of cells repressed):

ESPIYVGSSSDGDTTPRQPPTSPISIGSSSPSEGSWGDDTAMLVLLAEIAEEASKNEKECSENNQAGEDNGDNEISKESQ

BKPyV LT (P03071)

Gene: LT ; Protein Family: LT



Extended repression domain from residues 41 to 160:

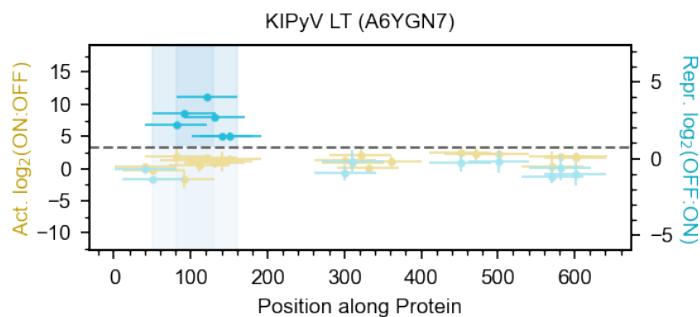
FHPDKGGDEDKMKRMNTLYKKMEQDVKVAHQPDFGTWSSEVPTYGTEEWESWWSSFNEKWDEDLFCHEDMFASDEEATADSQHSTPPKKRKVE  
DPKDFPSDLHQFLSQAVFSNRTLAC

Max tile of repression domain from residues 81 to 160 (estimated 68.0% to 83.2% of cells repressed):

EVPTYGTEEWESWWSSFNEKWDEDLFCHEDMFASDEEATADSQHSTPPKKRKVEDPKDFPSDLHQFLSQAVFSNRTLAC

KIPyV LT (A6YGN7)

Gene: LT ; Protein Family: LT



Extended repression domain from residues 81 to 190:

QSSQIPTYGTPDWDEWWSQFNTYWEEELRCNESMPSSPKRSAPEEEPSCSQATPPKKHAFDASLEFPKELLEFVSHAVFSNKCITCFVVHTTREKG  
VLYKKLLQKYQC

Max tile of repression domain from residues 81 to 160 (estimated 90.1% to 93.1% of cells repressed):

QSSQIPTYGTPDWDEWWSQFNTYWEEELRCNESMPSSPKRSAPEEEPSCSQATPPKKHAFDASLEFPKELLEFVSHAVF

Extended repression domain from residues 41 to 130:

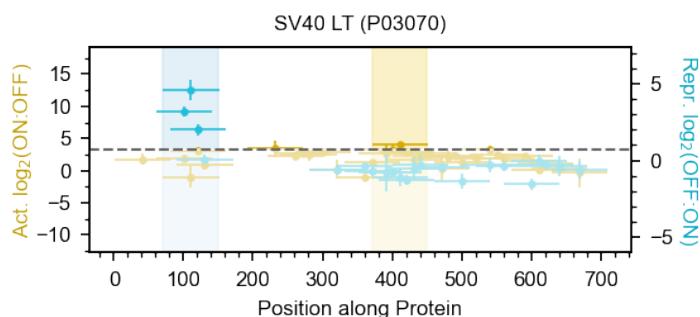
YHPDKGGNEESMKLLNSLYLKLQDSVSSVHDLNEEEDNIWQSSQIPTYGTPDWDEWWSQFNTYWEEELRCNESMPSSPKRSAPEEEPSCS

Max tile of repression domain from residues 51 to 130 (estimated 61.4% to 74.1% of cells repressed):

SMKLLNSLYLKLQDSVSSVHDLNEEEDNIWQSSQIPTYGTPDWDEWWSQFNTYWEEELRCNESMPSSPKRSAPEEEPSCS

## SV40 LT (P03070)

Gene: LT ; Protein Family: LT



Extended activation domain from residues 361 to 450:

LTNRFNDLLDRMDIMFGSTGSADIEEW MAGVAWLHCLLPKMD SVVYDFLKCMVYNIPKKRYWLFKG PIDSGKTTLAAALLELCGGKALNV

Max tile of activation domain from residues 371 to 450 (estimated 16.8% to 29.1% of cells activated):

RMDIMFGSTGSADIEEW MAGVAWLHCLLPKMD SVVYDFLKCMVYNIPKKRYWLFKG PIDSGKTTLAAALLELCGGKALNV

Extended repression domain from residues 61 to 160:

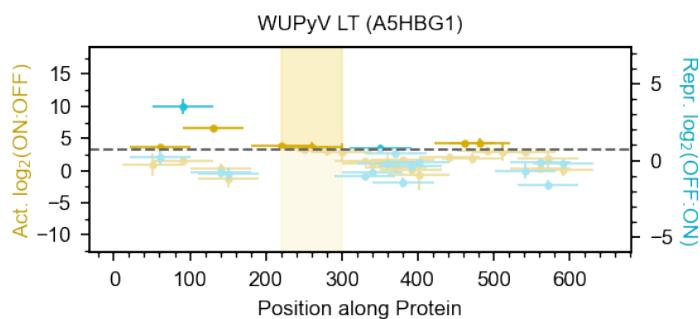
KMEDGVKYAHQPDFGGFWDATEIPTYGTDEWEQWWNAFNEENLFCSEEMPSSDDEATADSQHSTPPKKRKVEDPKDFPSELLSFLSHAVFSNRTLA  
CFA

Max tile of repression domain from residues 71 to 150 (estimated 91.1% to 99.6% of cells repressed):

QPDFGGFWDATEIPTYGTDEWEQWWNAFNEENLFCSEEMPSSDDEATADSQHSTPPKKRKVEDPKDFPSELLSFLSHAV

WUPyV LT (A5HBG1)

Gene: LT ; Protein Family: LT



Extended activation domain from residues 211 to 300:

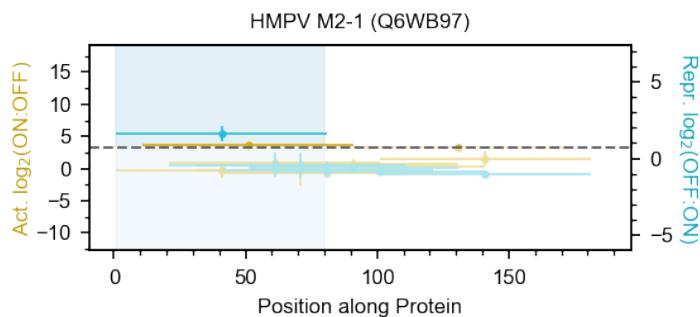
LVFILTPFRHRVS AVNNFCKGYCTISFLFC KVNNAYGLYSR MTRDPFTLCEENIPGGLKENDFKAEDLYGEFKDQLNWKALSEFALELG

Max tile of activation domain from residues 221 to 300 (estimated 11.1% to 28.6% of cells activated):

RVSAVNNFCKGYCTISFLFC KVNNAYGLYSR MTRDPFTLCEENIPGGLKENDFKAEDLYGEFKDQLNWKALSEFALELG

HMPV M2-1 (Q6WB97)

Gene: M2-1 ; Protein Family: M2-1



Extended repression domain from residues 1 to 80:

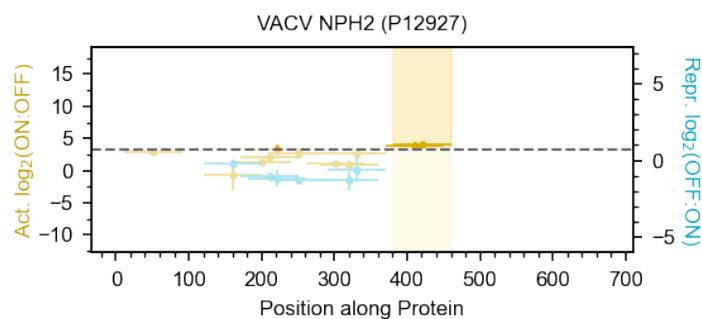
MSRKAPCKYEVRGKCNRGSECKFNHNYWSWPDRYLLIRSNYLLNQLLRNTDRADGLIISGAGREDRTQDFVLGSTNVVQ

Max tile of repression domain from residues 1 to 80 (estimated 21.4% to 40.7% of cells repressed):

MSRKAPCKYEVRGKCNRGSECKFNHNYWSWPDRYLLIRSNYLLNQLLRNTDRADGLIISGAGREDRTQDFVLGSTNVVQ

VACV NPH2 (P12927)

Gene: NPH2 ; Protein Family: NPH2



Extended activation domain from residues 371 to 460:

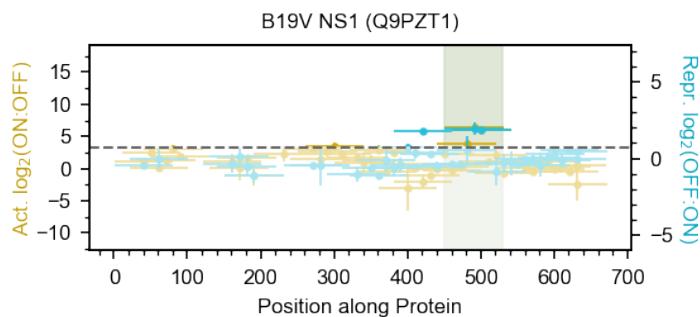
MAYIEEEKRLNLVTAIQMYTPPDGSSGIVFVASVAQCHEYKSYLEKRLPYDMYIIHGKVLDIDEILEKVYSSPNVSIIISTPYLESSVTIR

Max tile of activation domain from residues 381 to 460 (estimated 17.0% to 27.8% of cells activated):

LVTAIQMYTPPDGSSGIVFVASVAQCHEYKSYLEKRLPYDMYIIHGKVLDIDEILEKVYSSPNVSIIISTPYLESSVTIR

B19V NS1 (Q9PZT1)

Gene: NS1 ; Protein Family: NS1



Extended activation domain from residues 441 to 540:

KLNFTVRCSPDMGLLTEADVQQWLTWCNAQSWDHYENWAINYTFDFPGINADALHPDLQTTPIVTDTSISSSGGESSEELSESSFFNLITPGAWNTETPR

Max tile of activation domain from residues 451 to 530 (estimated 61.8% to 67.2% of cells activated):

DMGLLTEADVQQWLTWCNAQSWDHYENWAINYTFDFPGINADALHPDLQTTPIVTDTSISSSGGESSEELSESSFFNLIT

Extended repression domain from residues 451 to 540:

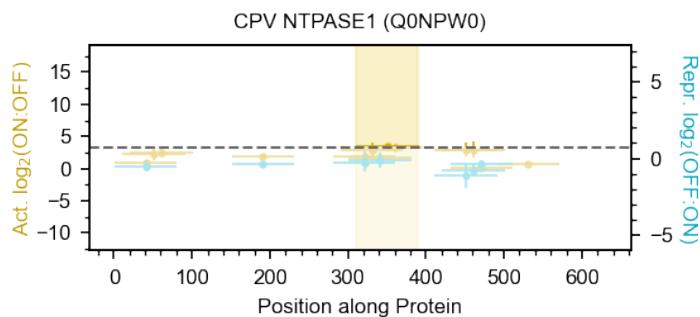
DMGLLTEADVQQWLTWCNAQSWDHYENWAINYTFDFPGINADALHPDLQTTPIVTDTSISSSGGESSEELSESSFFNLITPGAWNTETPR

Max tile of repression domain from residues 451 to 530 (estimated 27.8% to 49.8% of cells repressed):

DMGLLTEADVQQWLTWCNAQSWDHYENWAINYTFDFPGINADALHPDLQTTPIVTDTSISSSGGESSEELSESSFFNLIT

CPV NTPASE1 (Q0NPW0)

Gene: NTPASE1 ; Protein Family: NTPASE1



Extended activation domain from residues 311 to 400:

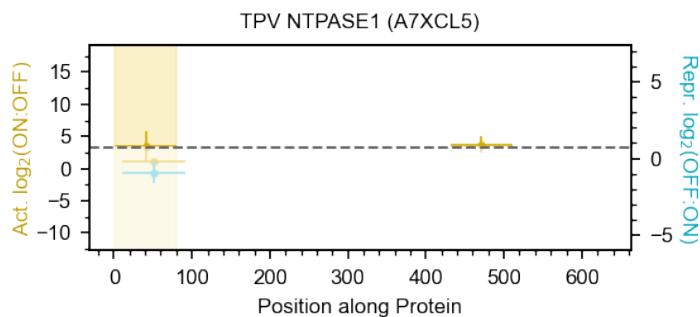
EYAQEIATLYNDFKNSLRDREFSKSALDTFKRGELLGGDASAADISLFTELKEKSVKFIDVCLGILASHGKCLVFEPFVNQSGIEILLLY

Max tile of activation domain from residues 311 to 390 (estimated 13.0% to 19.0% of cells activated):

EYAQEIATLYNDFKNSLRDREFSKSALDTFKRGELLGGDASAADISLFTELKEKSVKFIDVCLGILASHGKCLVFEPFVN

TPV NTPASE1 (A7XCL5)

Gene: NTPASE1 ; Protein Family: NTPASE1



Extended activation domain from residues 1 to 80:

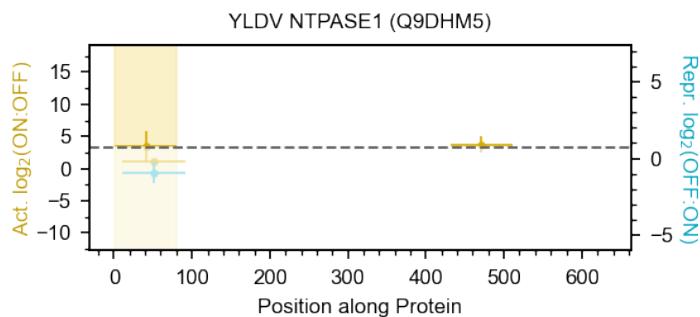
MSTQHAAYIDYALNRMESMPIEMLGSDTITLKPYQHFVAKVFLGLDTMHSILLHDTGVGKTITTVFILKHLKDIYTNWT

Max tile of activation domain from residues 1 to 80 (estimated 0.0% to 51.2% of cells activated):

MSTQHAAYIDYALNRMESMPIEMLGSDTITLKPYQHFVAKVFLGLDTMHSILLHDTGVGKTITTVFILKHLKDIYTNWT

YLDV NTPASE1 (Q9DHM5)

Gene: NTPASE1 ; Protein Family: NTPASE1



Extended activation domain from residues 1 to 80:

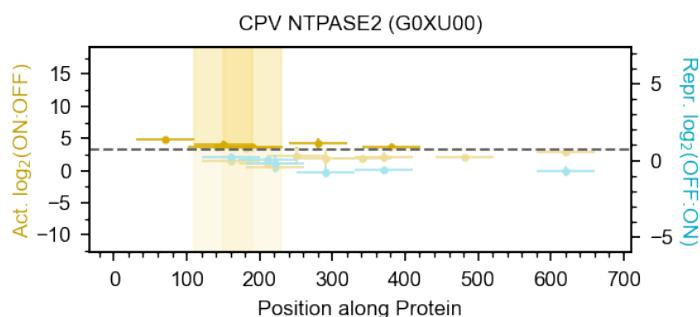
MSTQHAAYIDYALNRMESMPIEMLGSDTITLKPYQHFVAKVFLGLDTMHSILLHDTGVGKTITTVFILKHLKDIYNWT

Max tile of activation domain from residues 1 to 80 (estimated 0.0% to 51.2% of cells activated):

MSTQHAAYIDYALNRMESMPIEMLGSDTITLKPYQHFVAKVFLGLDTMHSILLHDTGVGKTITTVFILKHLKDIYNWT

CPV NTPASE2 (G0XU00)

Gene: NTPASE2 ; Protein Family: NTPASE2



Extended activation domain from residues 101 to 190:

ECYSFLKCITNTEINSFDDYILRGLLEAGNSLQIFSNSVGKRTDTVGVVLGNKYPFSKIPLASLTPKAQREIFSAWISHRPVVLTGGTGVG

Max tile of activation domain from residues 111 to 190 (estimated 16.9% to 31.8% of cells activated):

NTEINSFDDYILRGLLEAGNSLQIFSNSVGKRTDTVGVVLGNKYPFSKIPLASLTPKAQREIFSAWISHRPVVLTGGTGVG

Extended activation domain from residues 141 to 230:

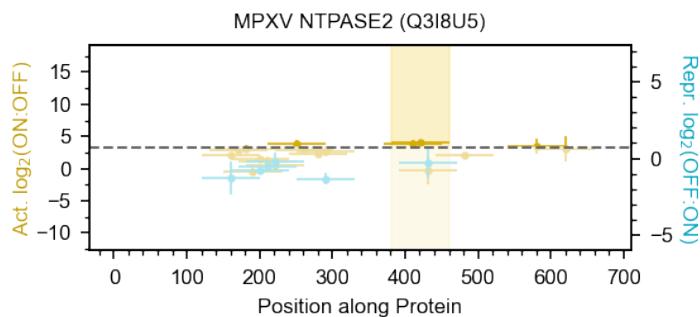
KRTDTVGVVLGNKYPFSKIPLASLTPKAQREIFSAWISHRPVVLTGGTGVGKTSQVPKLLLWFNYLFGGFSTLDKITDFHERPVILSPRI

Max tile of activation domain from residues 151 to 230 (estimated 12.7% to 25.2% of cells activated):

NKYPFSKIPLASLTPKAQREIFSAWISHRPVVLTGGTGVGKTSQVPKLLLWFNYLFGGFSTLDKITDFHERPVILSPRI

MPXV NTPASE2 (Q3I8U5)

Gene: NTPASE2 ; Protein Family: NTPASE2



Extended activation domain from residues 371 to 460:

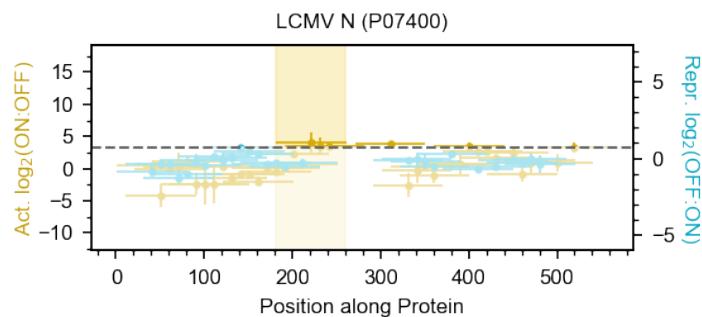
MAYIEEEKRNLTVAIQMYTPPDGSSGIVFVASVACHEYKSYLEKRLPYDMYIIHGKVLDIDEILEKVYSSPNVSIIISTPYLESSVTIR

Max tile of activation domain from residues 381 to 460 (estimated 17.0% to 27.8% of cells activated):

LVTAIQMYTPPDGSSGIVFVASVACHEYKSYLEKRLPYDMYIIHGKVLDIDEILEKVYSSPNVSIIISTPYLESSVTIR

LCMV N (P07400)

Gene: N ; Protein Family: N



Extended activation domain from residues 181 to 280:

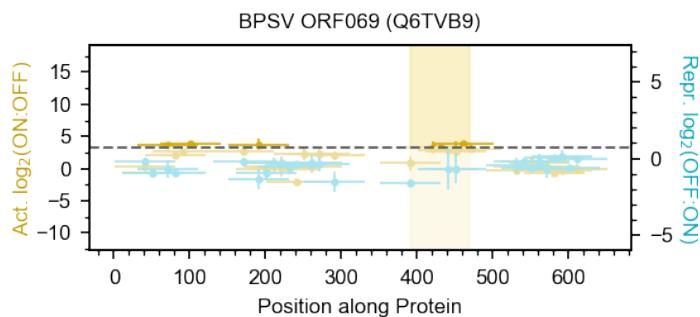
ACMAKQSQTPLNDVVQALTDLGLLYTVKYPNLSDLERLKDKHPVLGVITEQQSSINISGYNFSLGAAVKAGAALLHGGNMLESILIKPSNSEDLLKAVLG

Max tile of activation domain from residues 181 to 260 (estimated 7.6% to 48.8% of cells activated):

ACMAKQSQTPLNDVVQALTDLGLLYTVKYPNLSDLERLKDKHPVLGVITEQQSSINISGYNFSLGAAVKAGAALLHGGNM

BPSV ORF069 (Q6TVB9)

Gene: ORF069 ; Protein Family: ORF069



Extended activation domain from residues 381 to 470:

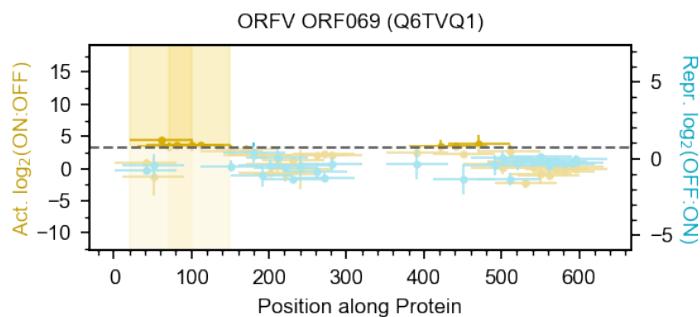
SEYNGSHSNNPHTIDGRPKTFAIVTSKMKASLEELLEAYNSPENDDGSRLMFLFSSNIMSESYTLKEVRNIWFMTIPDTFSQFNQILGRA

Max tile of activation domain from residues 391 to 470 (estimated 11.8% to 17.5% of cells activated):

PHTIDGRPKTFAIVTSKMKASLEELLEAYNSPENDDGSRLMFLFSSNIMSESYTLKEVRNIWFMTIPDTFSQFNQILGRA

ORFV ORF069 (Q6TVQ1)

Gene: ORF069 ; Protein Family: ORF069



Extended activation domain from residues 21 to 120:

PHQLATVDFLIRRVLDDNVSVLLFHIMSGKTVIALLFAMVASRTKKVYILVPNVNVNIFNYSMVMVANLFNAPFVAENIFVYSTTSFYSLNCNDGVVN

Max tile of activation domain from residues 21 to 100 (estimated 21.5% to 33.2% of cells activated):

PHQLATVDFLIRRVLDDNVSVLLFHIMSGKTVIALLFAMVASRTKKVYILVPNVNVNIFNYSMVMVANLFNAPFVAEN

Extended activation domain from residues 61 to 150:

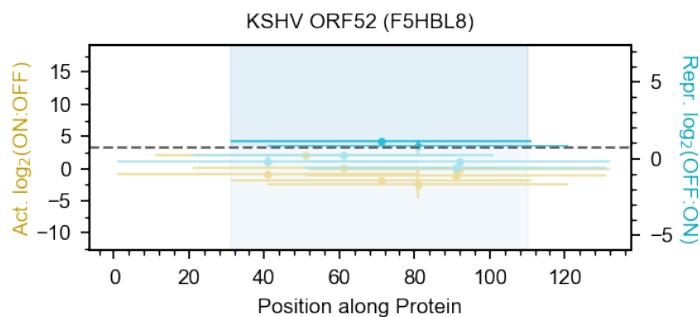
VASRTKKVYILVPNVNVNMNIFNYSMVMVANLFNAPFVAENIFVYSTTSFYSLNCNDGVVNYNGLSKYENSFVVDEAHNIFGNNTGELMM

Max tile of activation domain from residues 71 to 150 (estimated 18.0% to 19.0% of cells activated):

LVPNVNVNMNIFNYSMVMVANLFNAPFVAENIFVYSTTSFYSLNCNDGVVNYNGLSKYENSFVVDEAHNIFGNNTGELMM

KSHV ORF52 (F5HBL8)

Gene: ORF52 ; Protein Family: ORF52



Extended repression domain from residues 31 to 120:

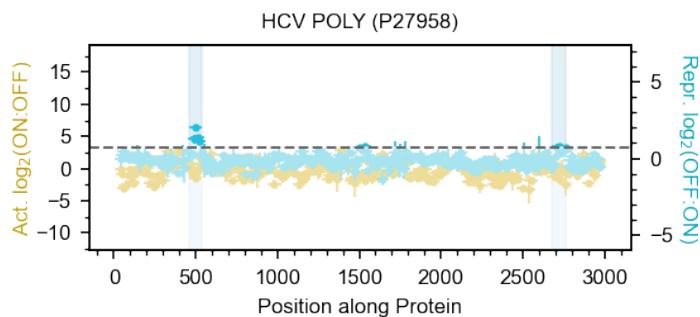
LRKALGSTADPRDRPLTATEKEAQLTATVGALSAAAACKIEARVRTIFSKVVTQKVDDALKGLSLRIDVCMSDGGTAKPPPGANNRRRR

Max tile of repression domain from residues 31 to 110 (estimated 21.5% to 21.7% of cells repressed):

LRKALGSTADPRDRPLTATEKEAQLTATVGALSAAAACKIEARVRTIFSKVVTQKVDDALKGLSLRIDVCMSDGGTAKP

HCV POLY (P27958)

Gene: POLY ; Protein Family: POLY



Extended repression domain from residues 451 to 560:

GCPERLASCRRLTDFAQGWGPISYANGSGLDERPYCWHYPPRPCGIVPAKSVCVPVYCFTPSPVVGTTDRSGAPTYSWGANDTDVFVLNNTRPPLGNWFGCTWMNSTGF

Max tile of repression domain from residues 461 to 540 (estimated 35.7% to 41.1% of cells repressed):

RLTDFAQGWGPISYANGSGLDERPYCWHYPPRPCGIVPAKSVCVPVYCFTPSPVVGTTDRSGAPTYSWGANDTDVFVLN

Extended repression domain from residues 2671 to 2760:

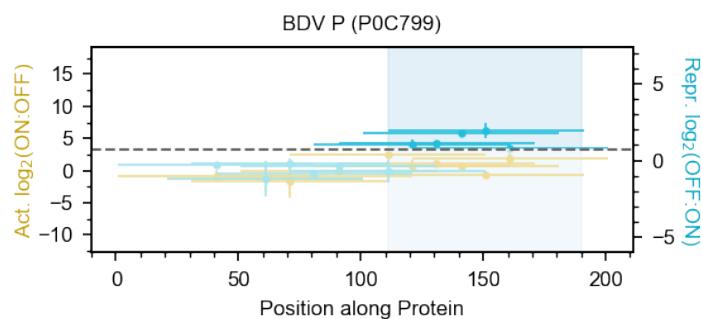
VAIKSLTERLYVGGPLTNSRGENCYRRCRASRVLTSCGNTLTRYIKARAACRAAGLQDCTMLVCGDDLVICESAGVQEDAASLRAFT

Max tile of repression domain from residues 2681 to 2760 (estimated 17.9% to 20.2% of cells repressed):

YVGGPLTNSRGENCYRRCRASRVLTSCGNTLTRYIKARAACRAAGLQDCTMLVCGDDLVICESAGVQEDAASLRAFT

BDV P (P0C799)

Gene: P ; Protein Family: P



Extended repression domain from residues 81 to 200:

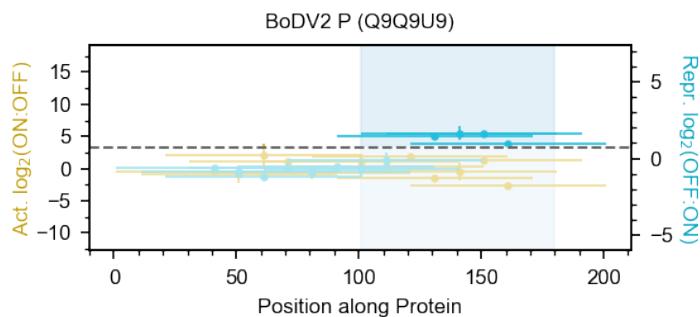
ELAENSMIEAAEVRGTLGDISARIEAGFESLSALQVETIQTAAQRCDHSIRILGENIKILDRSRSMKTMMETKLMMEKV DLLYASTAVGTSAPMLPSHPAPP  
RIYPQLPSAPTTDEWDII

Max tile of repression domain from residues 111 to 190 (estimated 26.6% to 50.7% of cells repressed):

LSALQVETIQTAAQRCDHSIRILGENIKILDRSRSMKTMMETKLMMEKV DLLYASTAVGTSAPMLPSHPAPPRIYPQLPS

BoDV2 P (Q9Q9U9)

Gene: P ; Protein Family: P



Extended repression domain from residues 91 to 200:

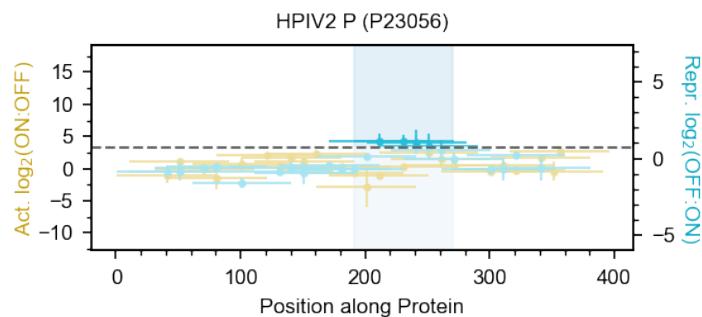
EEVRGTLGDISARLEAGFESLSALQVETIQTAAQRCDHSDSIRVLGENIKILDERSMKTMMETKLMMEKV DLLYASTAVGTSAPMLPSHPAPPRIYPQLPSA  
PTADEWDII

Max tile of repression domain from residues 101 to 180 (estimated 22.4% to 41.6% of cells repressed):

SARLEAGFESLSALQVETIQTAAQRCDHSDSIRVLGENIKILDERSMKTMMETKLMMEKV DLLYASTAVGTSAPMLPSHPA

HPIV2 P (P23056)

Gene: P ; Protein Family: P



Extended repression domain from residues 191 to 290:

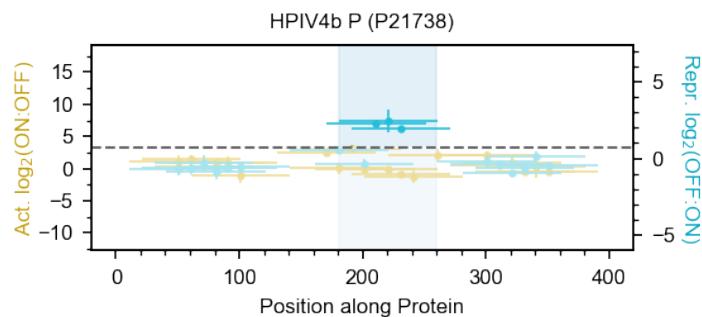
SSGVIPGVQSRPQLASSPAHADPAPASAENVKEIIELLKGLDLRLQTVEGKVDKILATSATIINLNEMTSLKASVATMEGMITTIKIMDPSTPTNVPV

Max tile of repression domain from residues 191 to 270 (estimated 18.4% to 27.1% of cells repressed):

SSGVIPGVQSRPQLASSPAHADPAPASAENVKEIIELLKGLDLRLQTVEGKVDKILATSATIINLNEMTSLKASVATM

HPIV4b P (P21738)

Gene: P ; Protein Family: P



Extended repression domain from residues 171 to 270:

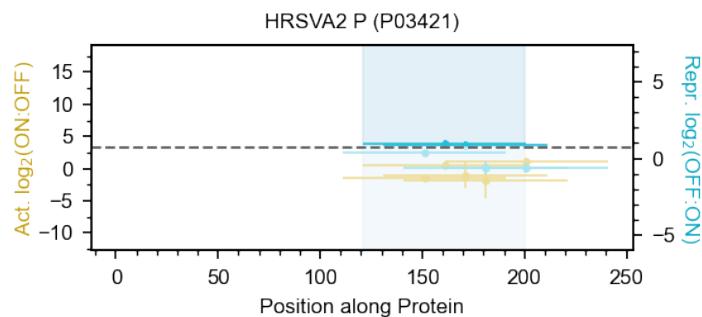
KIQSSFQDIEESTRFHGSMEEPQYQSGAIHVAHQSNQLPPSKNVHVEDVPKFANYALEILDAIKALEVRLDRIEGKVDKIMLTQNTIQQTKNDTQQIKGS

Max tile of repression domain from residues 181 to 260 (estimated 31.6% to 76.2% of cells repressed):

ESTRFHGSMEEPQYQSGAIHVAHQSNQLPPSKNVHVEDVPKFANYALEILDAIKALEVRLDRIEGKVDKIMLTQNTIQQT

HRSVA2 P (P03421)

Gene: P ; Protein Family: P



Extended repression domain from residues 121 to 210:

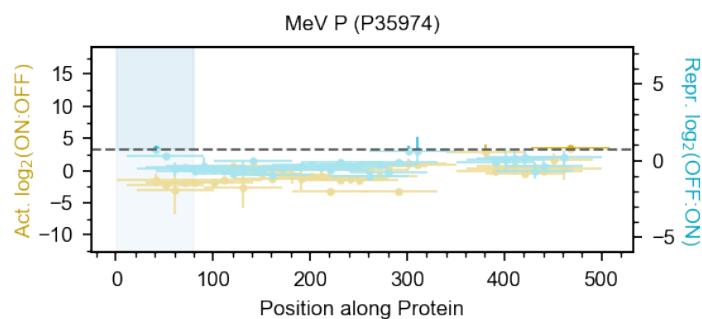
EEINDQTNDNITARLDRIEKLSEILGMLHTLVVASAGPTSARDGIRDAMIGLREEMIEKIRTEALMTNDRLEAMRLNEESEKMAKDT

Max tile of repression domain from residues 121 to 200 (estimated 17.6% to 23.1% of cells repressed):

EEINDQTNDNITARLDRIEKLSEILGMLHTLVVASAGPTSARDGIRDAMIGLREEMIEKIRTEALMTNDRLEAMRLRN

MeV P (P35974)

Gene: P ; Protein Family: P



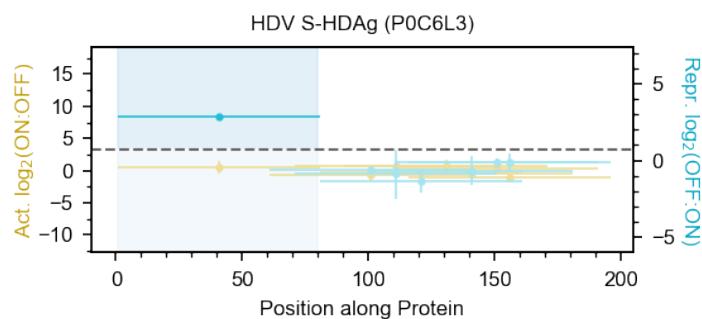
Extended repression domain from residues 1 to 80:

MAEEQARHVKNGLECIRALKAEPIGSLAIEEAMAAWSEISDNPGQERATCREEKAGSSGLSKPCLSAIGSTEGGAPRIRG

Max tile of repression domain from residues 1 to 80 (estimated 17.2% to 19.7% of cells repressed):

MAEEQARHVKNGLECIRALKAEPIGSLAIEEAMAAWSEISDNPGQERATCREEKAGSSGLSKPCLSAIGSTEGGAPRIRG

HDV S-HDAg (P0C6L3)  
Gene: S-HDAg ; Protein Family: S-HDAg



Extended repression domain from residues 1 to 80:

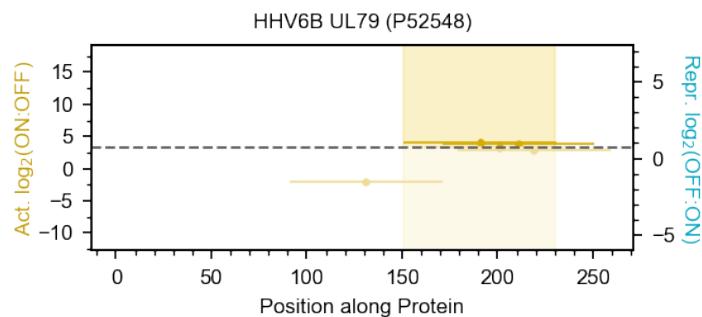
MSRPEGRKNRGGGREEVLEQWVSGRKLEELERDLRKVKKIKKLEDEHPWLGNIKGILGKKDKDGE~~GAPP~~AKRARTDQME

Max tile of repression domain from residues 1 to 80 (estimated 56.1% to 71.8% of cells repressed):

MSRPEGRKNRGGGREEVLEQWVSGRKLEELERDLRKVKKIKKLEDEHPWLGNIKGILGKKDKDGE~~GAPP~~AKRARTDQME

HHV6B UL79 (P52548)

Gene: U52 ; Protein Family: UL79



Extended activation domain from residues 151 to 250:

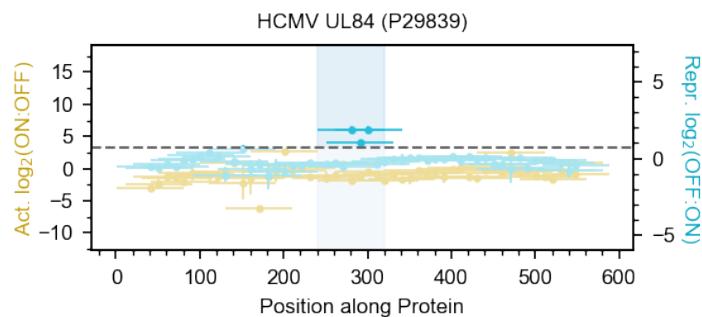
FSVGAIYNHRLLKICRFFNRFWDQEREPAVRLICKHLWFAYLIMFGKFEISTLAYNQQRAEHKAGLFSFLQNDFKVFCGMSENPLLDSSAIFDLTGIS

Max tile of activation domain from residues 151 to 230 (estimated 18.8% to 30.2% of cells activated):

FSVGAIYNHRLLKICRFFNRFWDQEREPAVRLICKHLWFAYLIMFGKFEISTLAYNQQRAEHKAGLFSFLQNDFKVFCG

HCMV UL84 (P29839)

Gene: UL84 ; Protein Family: UL84



Extended repression domain from residues 241 to 340:

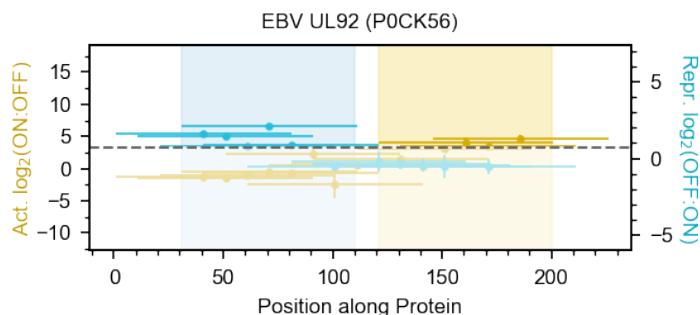
PPLKRVPLRRKAAHHTALHDCMALHLPELTFESTLDINNVTENAASVADAAESTDADLPTLTVRVRHAVCWHRVEGGISGPRGLTSRISARLSETTAKT

Max tile of repression domain from residues 241 to 320 (estimated 30.7% to 40.9% of cells repressed):

PPLKRVPLRRKAAHHTALHDCMALHLPELTFESTLDINNVTENAASVADAAESTDADLPTLTVRVRHAVCWHRVEGGIS

## EBV UL92 (P0CK56)

Gene: BDLF4 ; Protein Family: UL92



Extended activation domain from residues 121 to 210:

YHYFLNENVISGVSEALFDQEGALRPHIPALVSFVFPCCLMLFRGASSEKVVVDVVLSLYIHVIISIYSQKTVYGALLFKSTRNKRYDAVA

Max tile of activation domain from residues 121 to 200 (estimated 15.1% to 35.6% of cells activated):

YHYFLNENVISGVSEALFDQEGALRPHIPALVSFVFPCCLMLFRGASSEKVVVDVVLSLYIHVIISIYSQKTVYGALLFKS

Extended repression domain from residues 1 to 120:

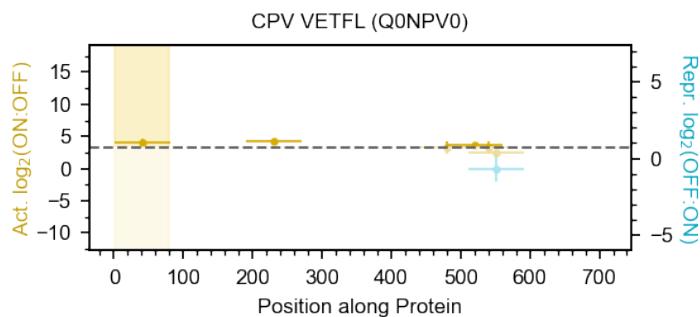
MSDQGRRLSLPRGEGGTDEPNPRHLCYSKLEFHLPESMASVFACWGCHEYHVCDSSECTLIETHEGVVCALTGNYMGPHFQPALRPWTEIRQDT  
QDQRDKWEPEQVQGLVKTVVNHL

Max tile of repression domain from residues 31 to 110 (estimated 39.1% to 42.9% of cells repressed):

EFHLPLPESMASVFACWGCHEYHVCDSSECTLIETHEGVVCALTGNYMGPHFQPALRPWTEIRQDTQDQRDKWEPEQVQ

CPV VETFL (Q0NPV0)

Gene: VETFL ; Protein Family: VETFL



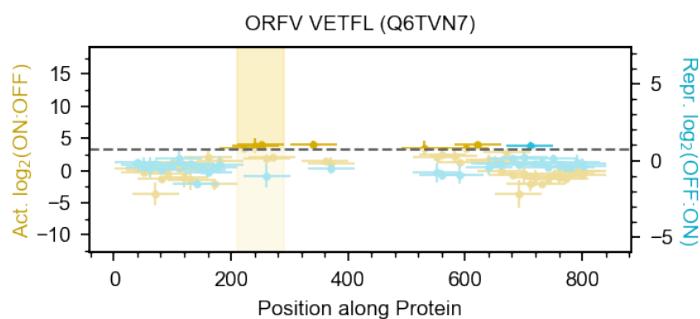
Extended activation domain from residues 1 to 80:

MRYIVSPQLVLQVGKGQEVERTALYLTPYDYIDEKSPIYYFLRSHLNIQQPEIVKRHILLTLRMTQLKGYLGNLDDIKDDI

Max tile of activation domain from residues 1 to 80 (estimated 14.3% to 30.9% of cells activated):

MRYIVSPQLVLQVGKGQEVERTALYLTPYDYIDEKSPIYYFLRSHLNIQQPEIVKRHILLTLRMTQLKGYLGNLDDIKDDI

ORFV VETFL (Q6TVN7)  
Gene: VETFL ; Protein Family: VETFL



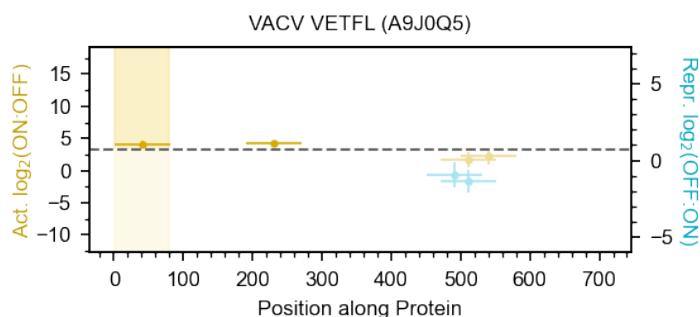
Extended activation domain from residues 201 to 290:

KGYLGSLLGLQDEIIVYSHKNNLEYSYVDNTIFNPFSPTQKCTLRTDGILYNAYADACNFLVVWVARAADTSAPEFGSFEEPNDLSIKF

Max tile of activation domain from residues 211 to 290 (estimated 19.1% to 27.7% of cells activated):

QDEIIVYSHKNNLEYSYVDNTIFNPFSPTQKCTLRTDGILYNAYADACNFLVVWVARAADTSAPEFGSFEEPNDLSIKF

VACV VETFL (A9J0Q5)  
Gene: VETFL ; Protein Family: VETFL



Extended activation domain from residues 1 to 80:

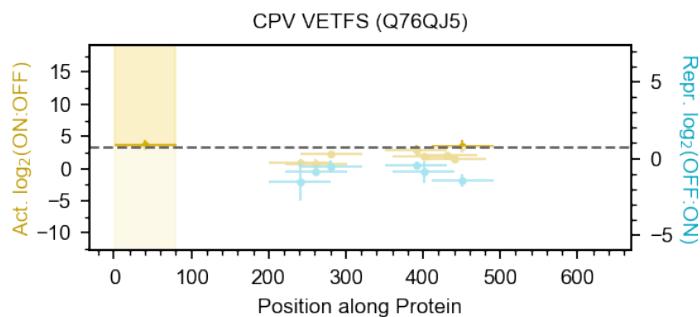
MRYIVSPQLVLQVGKGQEVERALYLTPYDYIDEKSPIYYFLRSHLNIQQPEIVKRHILLTLRMTQLKGYLGNLDDIKDDI

Max tile of activation domain from residues 1 to 80 (estimated 14.3% to 30.9% of cells activated):

MRYIVSPQLVLQVGKGQEVERALYLTPYDYIDEKSPIYYFLRSHLNIQQPEIVKRHILLTLRMTQLKGYLGNLDDIKDDI

CPV VETFS (Q76QJ5)

Gene: VETFS ; Protein Family: VETFS



Extended activation domain from residues 1 to 80:

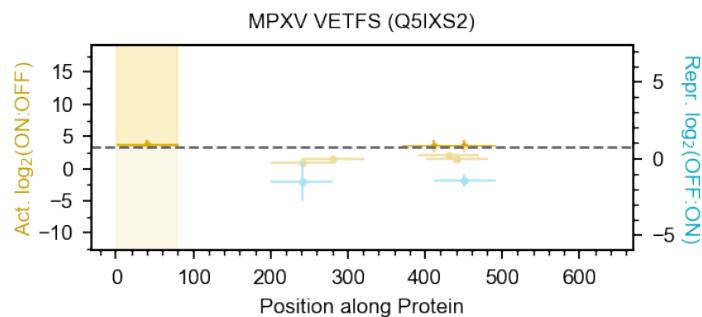
MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

Max tile of activation domain from residues 1 to 80 (estimated 11.3% to 28.1% of cells activated):

MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

MPXV VETFS (Q5IXS2)

Gene: VETFS ; Protein Family: VETFS



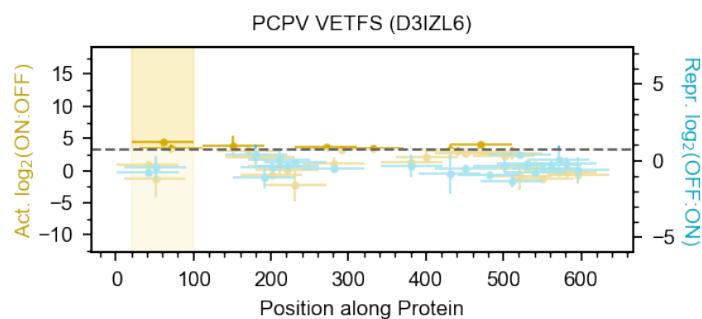
Extended activation domain from residues 1 to 80:

MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

Max tile of activation domain from residues 1 to 80 (estimated 11.3% to 28.1% of cells activated):

MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

PCPV VETFS (D3IZL6)  
Gene: VETFS ; Protein Family: VETFS



Extended activation domain from residues 21 to 110:

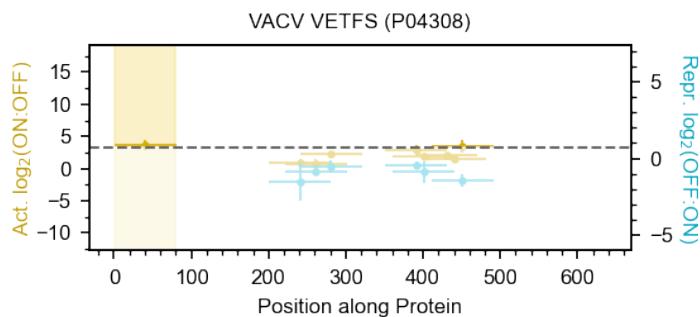
PHQLATVDFLIRRVLDDNVSVLLFHIMSGGKTVIALLFAMVASRTKKVYILVPNVNMNIFNYSMVMVANLFNAPFVAENIFVYSTTSFY

Max tile of activation domain from residues 21 to 100 (estimated 21.5% to 33.2% of cells activated):

PHQLATVDFLIRRVLDDNVSVLLFHIMSGGKTVIALLFAMVASRTKKVYILVPNVNMNIFNYSMVMVANLFNAPFVAEN

VACV VETFS (P04308)

Gene: VETFS ; Protein Family: VETFS



Extended activation domain from residues 1 to 80:

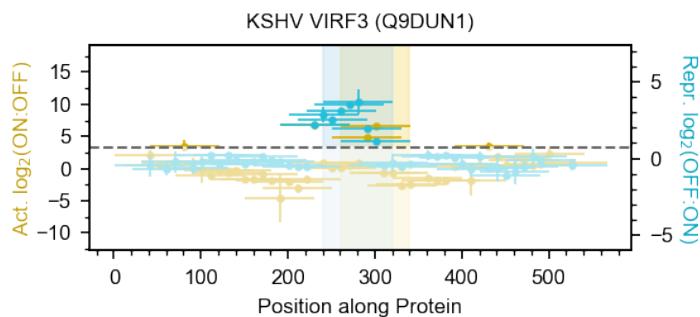
MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

Max tile of activation domain from residues 1 to 80 (estimated 11.3% to 28.1% of cells activated):

MNTGIIDLFDNHVDSIPTILPHQLATLDYLVRTIIDENRSVLLFHIMGSGKTIIALLFALVASRFKKVYILVPNINILKI

## KSHV VIRF3 (Q9DUN1)

Gene: K10.5 ; Protein Family: VIRF



Extended activation domain from residues 251 to 340:

CALMYHVGQEMDMLMRAMCDEDLFDLLGIPEDVIATSQPGGDTDASGVVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

Max tile of activation domain from residues 261 to 340 (estimated 66.7% to 67.9% of cells activated):

MDMLMRAMCDEDLFDLLGIPEDVIATSQPGGDTDASGVVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

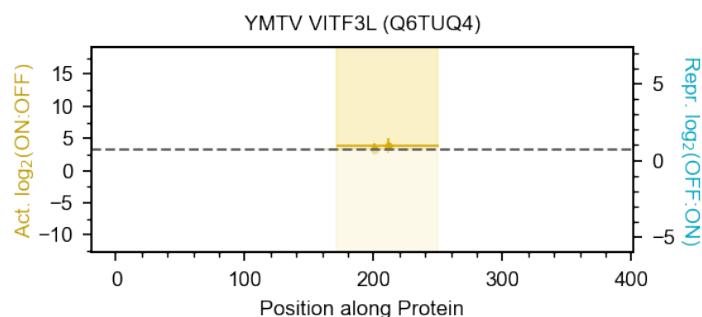
Extended repression domain from residues 191 to 340:

TRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPPADETTVHTDNVEDDLTLLDKESACALMYHVGQEMDMLMRAMCDEDLFDLLGIPEDVIATS QPGGDTDASGVVTEGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEV

Max tile of repression domain from residues 241 to 320 (estimated 66.6% to 96.9% of cells repressed):

DLTLLDKESACALMYHVGQEMDMLMRAMCDEDLFDLLGIPEDVIATSQPGGDTDASGVVTEGSIAASAVGAGVEDVYLAG

YMTV VITF3L (Q6TUQ4)  
Gene: VITF3L ; Protein Family: VITF3L



Extended activation domain from residues 161 to 250:

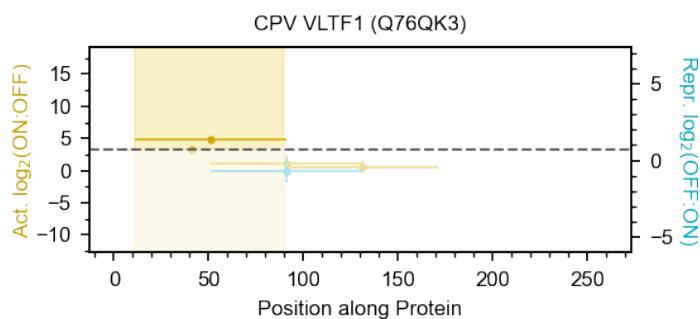
YMSTTVRYDNTNPWIKSVSKRMRVDIVNNAIITKGKSSILQTIEIVFLNRTCVKIFKDSTMHIILSKERRELGCVGLIDKLFSVYKILFL

Max tile of activation domain from residues 171 to 250 (estimated 9.0% to 37.0% of cells activated):

TNPWIKSVSKRMRVDIVNNAIITKGKSSILQTIEIVFLNRTCVKIFKDSTMHIILSKERRELGCVGLIDKLFSVYKILFL

CPV VLTF1 (Q76QK3)

Gene: VLTF1 ; Protein Family: VLTF1



Extended activation domain from residues 1 to 90:

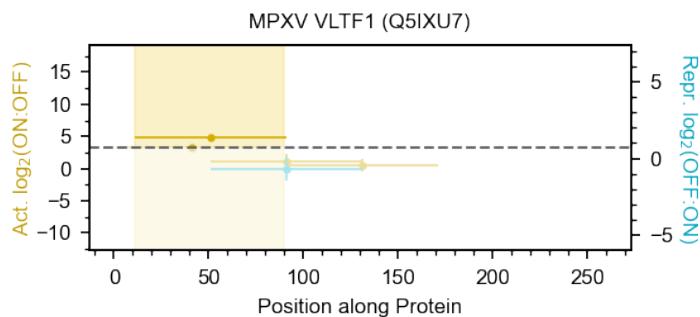
MSIRIKIDKLQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

Max tile of activation domain from residues 11 to 90 (estimated 32.2% to 39.3% of cells activated):

RQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

MPXV VLTF1 (Q5IXU7)

Gene: VLTF1 ; Protein Family: VLTF1



Extended activation domain from residues 1 to 90:

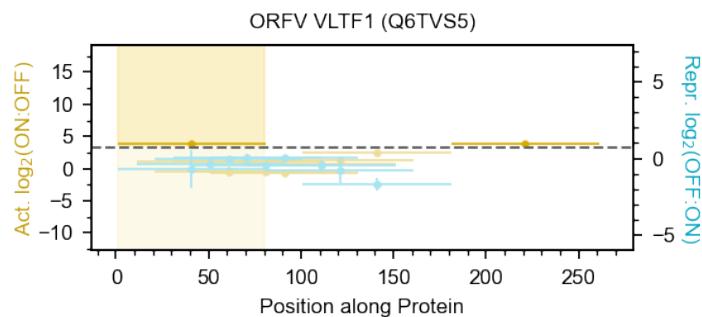
MSIRIKIDKLRQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

Max tile of activation domain from residues 11 to 90 (estimated 32.2% to 39.3% of cells activated):

RQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

ORFV VLTF1 (Q6TVS5)

Gene: VLTF1 ; Protein Family: VLTF1



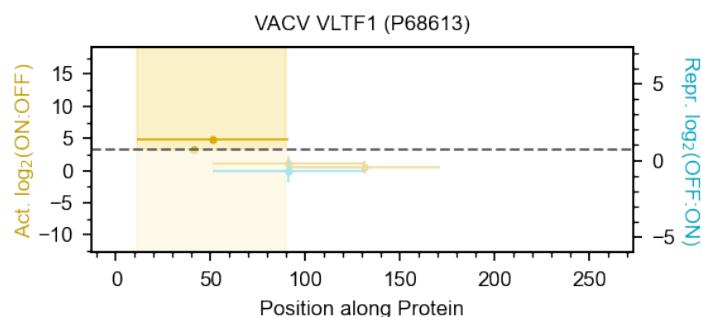
Extended activation domain from residues 1 to 80:

MTLRIKLEKLKQIVTYFSEFSEEVSNDVGDGMLYIFAALGGSVNIWTIVPLSASVVYDGDVSRVFNLPVLKVACLCS

Max tile of activation domain from residues 1 to 80 (estimated 16.2% to 24.1% of cells activated):

MTLRIKLEKLKQIVTYFSEFSEEVSNDVGDGMLYIFAALGGSVNIWTIVPLSASVVYDGDVSRVFNLPVLKVACLCS

VACV VLTF1 (P68613)  
Gene: VLTF1 ; Protein Family: VLTF1



Extended activation domain from residues 1 to 90:

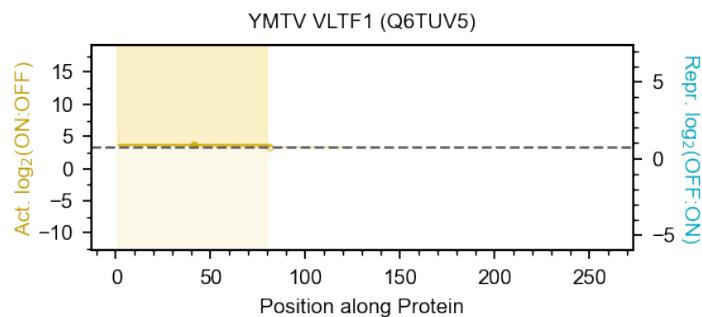
MSIRIKIDKLRQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

Max tile of activation domain from residues 11 to 90 (estimated 32.2% to 39.3% of cells activated):

RQIVAYFSEFSEEVSINV DSTDELMYIFAALGGSVNIWAIPLSASVFYRGAENIVFNLPVSKVKSCLCSFHNDAIIDIE

YMTV VLTF1 (Q6TUV5)

Gene: VLTF1 ; Protein Family: VLTF1



Extended activation domain from residues 1 to 80:

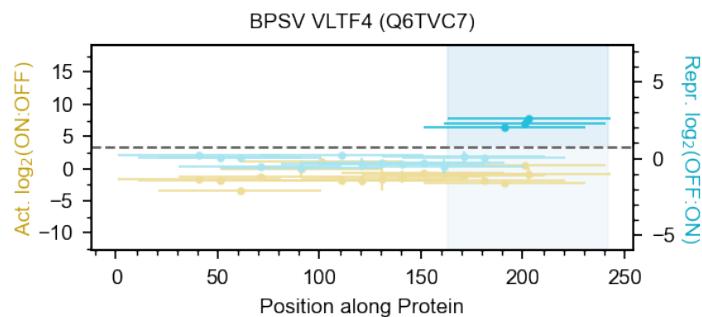
MSLRIKIDKLQRQIVAYFSEFSEEVSINVDAASSNIMYIFAALGGSVNIWAMVPLSSSVFYEGENNKVFNLPVSKVKSCCLS

Max tile of activation domain from residues 1 to 80 (estimated 17.0% to 20.2% of cells activated):

MSLRIKIDKLQRQIVAYFSEFSEEVSINVDAASSNIMYIFAALGGSVNIWAMVPLSSSVFYEGENNKVFNLPVSKVKSCCLS

BPSV VLTF4 (Q6TVC7)

Gene: VLTF4 ; Protein Family: VLTF4



Extended repression domain from residues 151 to 242:

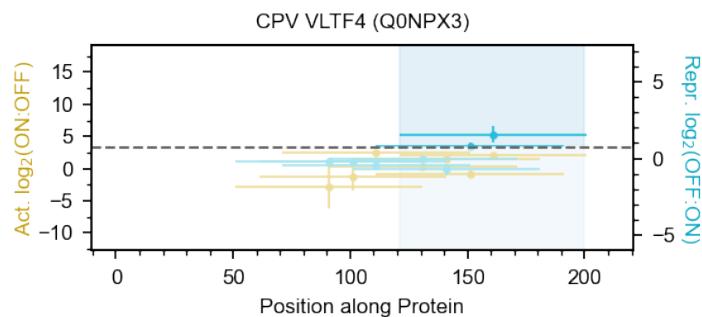
VASGGAAAGDDELDELGESDLDLAFAAILADFKHLTGRVKALSSVLTDVQASGVRRSFAGLSKALTEAAAIAAGGSKVPVAPRKKKAAGKK

Max tile of repression domain from residues 163 to 242 (estimated 56.9% to 60.4% of cells repressed):

LDELGESDLDLAFAAILADFKHLTGRVKALSSVLTDVQASGVRRSFAGLSKALTEAAAIAAGGSKVPVAPRKKKAAGKK

CPV VLTF4 (Q0NPX3)

Gene: VLTF4 ; Protein Family: VLTF4



Extended repression domain from residues 111 to 200:

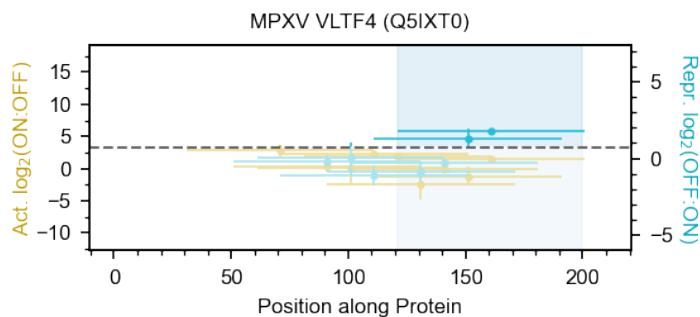
AVELDDSDGDDDEPMAQAGAKVNHSARSSDLSDLKVATDNIVKDLKKIITRISAVSTVLEDVQAAGISRQFTSMTKAITLSDLVTEGKSKV

Max tile of repression domain from residues 121 to 200 (estimated 20.8% to 41.4% of cells repressed):

DEPMAQAGAKVNHSARSSDLSDLKVATDNIVKDLKKIITRISAVSTVLEDVQAAGISRQFTSMTKAITLSDLVTEGKSKV

MPXV VLTF4 (Q5IXT0)

Gene: VLTF4 ; Protein Family: VLTF4



Extended repression domain from residues 111 to 200:

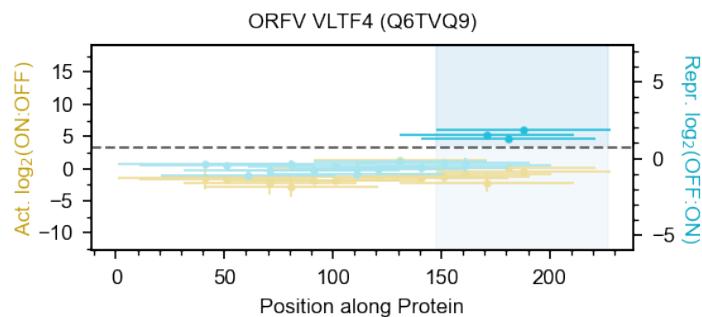
VELDDSDGDDEPMVQVEAGKVNHSTRSDLSDLKVATDNIVKDLKKIITRISAVSTVLEDVQAAGISRQFTSMTKAITLSDLVTEGKSKV

Max tile of repression domain from residues 121 to 200 (estimated 30.0% to 35.0% of cells repressed):

EPMVQVEAGKVNHSTRSDLSDLKVATDNIVKDLKKIITRISAVSTVLEDVQAAGISRQFTSMTKAITLSDLVTEGKSKV

ORFV VLTF4 (Q6TVQ9)

Gene: VLTF4 ; Protein Family: VLTF4



Extended repression domain from residues 131 to 227:

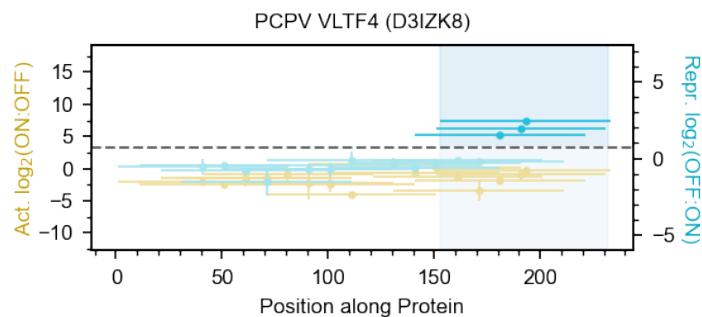
GDAEGGASARSPSDIDNVDEMDDSDLMVAFSAILADFKDLTQRVKALSSVLTDVQATGIRRSFSTLGKALTEAAHIAINTGAKPVTAPRKKAATCKK

Max tile of repression domain from residues 148 to 227 (estimated 32.2% to 37.5% of cells repressed):

VDEMDDSDLMVAFSAILADFKDLTQRVKALSSVLTDVQATGIRRSFSTLGKALTEAAHIAINTGAKPVTAPRKKAATCKK

PCPV VLTF4 (D3IZK8)

Gene: VLTF4 ; Protein Family: VLTF4



Extended repression domain from residues 141 to 232:

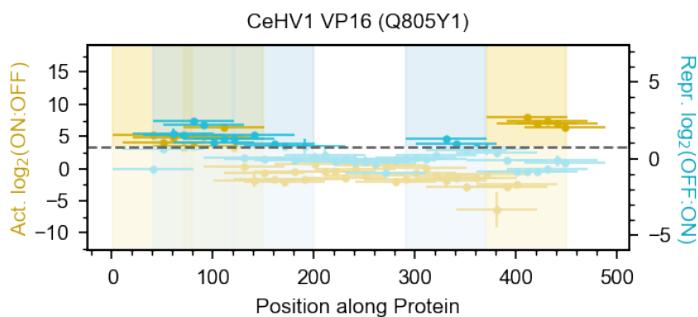
GASGRSPSDLNLDEMDDSDLMLAFSTILADFKDLTHRVKCLSTVLTDVQAAGVRRSFSALGKALNEAAIASTGAKPAAAPRKKAASKK

Max tile of repression domain from residues 153 to 232 (estimated 51.8% to 52.8% of cells repressed):

LDEMDDSDLMLAFSTILADFKDLTHRVKCLSTVLTDVQAAGVRRSFSALGKALNEAAIASTGAKPAAAPRKKAASKK

## CeHV1 VP16 (Q805Y1)

Gene: UL48 ; Protein Family: VP16



Extended activation domain from residues 371 to 487:

RTNYGSSIEGLLELPDDTDYDPDAPPPPRLSFAAAPRRRSAAPRTDVSLGDELRFDGDSMTPSEALDDFDLTLGGDDHAGGLDDAAAYASLDMAD  
FEFEQMFTDALGIDDIGG

Max tile of activation domain from residues 371 to 450 (estimated 82.6% to 84.2% of cells activated):

RTNYGSSIEGLLELPDDTDYDPDAPPPPRLSFAAAPRRRSAAPRTDVSLGDELRFDGDSMTPSEALDDFDLTLGGDD

Extended activation domain from residues 41 to 160:

TGRLSQAQIMPQPPVPVPPAALYNRLLEDLGFGDPALCTILDSWNEDLFSGLPANPDLYRECQFLSTLPSDVVAWDGDGHTPDRGPIDIRAHGSAPPPL  
PARREDLPPAYCEALTRFFRA

Max tile of activation domain from residues 71 to 150 (estimated 59.4% to 65.9% of cells activated):

GFGDGPALCTILDSWNEDLFSGLPANPDLYRECQFLSTLPSDVVAWDGDGHTPDRGPIDIRAHGSAPPPLPARREDLPPAY

Extended activation domain from residues 1 to 100:

MESLFDELFDADMDTDGDSPPRRPTGTAELPDAATAPRPYATGRLSQAQIMPQPPVPVPPAALYNRLLEDLGFGDPALCTILDSWNEDLFSGLPANPDLY  
Y

Max tile of activation domain from residues 1 to 80 (estimated 40.5% to 40.9% of cells activated):

MESLFDELFDADMDTDGDSPPRRPTGTAELPDAATAPRPYATGRLSQAQIMPQPPVPVPPAALYNRLLEDLGFGDPALCT

Extended repression domain from residues 21 to 160:

RRPTGTAELPDAATAPRPYATGRLSQAQIMPQPPVPVPPAALYNRLLEDLGFGDPALCTILDSWNEDLFSGLPANPDLYRECQFLSTLPSDVVAWDGD  
GHTPDRGPIDIRAHGSAPPPLPARREDLPPAYCEALTRFFRA

Max tile of repression domain from residues 41 to 120 (estimated 50.4% to 50.5% of cells repressed):

TGRLSQAQIMPQPPVPVPPAALYNRLLEDLGFGDPALCTILDSWNEDLFSGLPANPDLYRECQFLSTLPSDVVAWDGDGH

Extended repression domain from residues 291 to 380:

ARLREINYVRERLNPLVRSAATEEPGAALTAAPALQTQRARSSGYFMTLIRVKLDAYSEGSGSEGAEVLREHAYSRRRERTNYGSSIEG

Max tile of repression domain from residues 291 to 370 (estimated 21.7% to 26.8% of cells repressed):

ARLREINYVRERLNPLVRSAATEEPGAALTAAPALQTQRARSSGYFMTLIRVKLDAYSEGSGSEGAEVLREHAYSRRRE

Extended repression domain from residues 121 to 210:

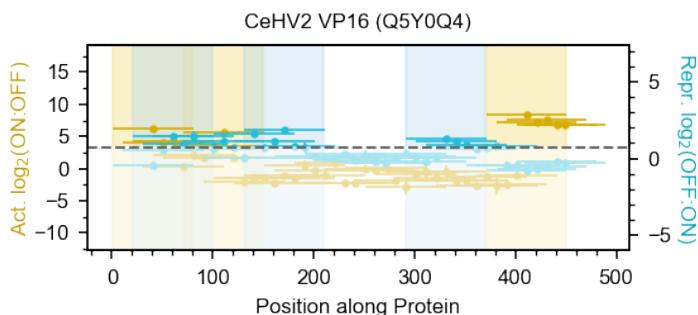
TPDRGPIDIRAHGSAPPPLPARREDLPPAYCEALTRFFRAELRAREESEYRRVLANCALYRYLRASTRQLHRQAALKGRPRDLQEMLRA

Max tile of repression domain from residues 121 to 200 (estimated 18.4% to 22.1% of cells repressed):

TPDRGPIDIRAHGSAPPPLPARREDLPPAYCEALTRFFRAELRAREESEYRRVLANCALYRYLRASTRQLHRQAALKGR

## CeHV2 VP16 (Q5Y0Q4)

Gene: UL48 ; Protein Family: VP16



Extended activation domain from residues 371 to 488:

ERTNYGSSIEGLLELPDDADYDPDAPPPLRLSFATGSPRRRSTVPRDVSLGDELCLDASPSMTPSEALDDFDLTLGGDDDHAGTLAAAYASLDMA  
DFEFEQMFTDALGIDEFGG

Max tile of activation domain from residues 371 to 450 (estimated 85.4% to 87.6% of cells activated):

ERTNYGSSIEGLLELPDDADYDPDAPPPLRLSFATGSPRRRSTVPRDVSLGDELCLDASPSMTPSEALDDFDLTLG

Extended activation domain from residues 1 to 100:

MESLFDELFDADMDTDGASPPRRPTGGAEELPDAATAPRPYATTRLSQAQIMPPPPVPIPPAALYNRLLEDLGFGDGPALCTILDSWNEDLFSGLPANPDLY

Max tile of activation domain from residues 1 to 80 (estimated 59.6% to 60.1% of cells activated):

MESLFDELFDADMDTDGASPPRRPTGGAEELPDAATAPRPYATTRLSQAQIMPPPPVPIPPAALYNRLLEDLGFGDGPALCT

Extended activation domain from residues 61 to 150:

ALYNRLLEDLGFGDGPALCTILDSWNEDLFSGLPANPDLYRECRFLSTLPGDVVAWGDAHAPDAPIDIRAHGSAPFPSLPARREGLPAY

Max tile of activation domain from residues 71 to 150 (estimated 44.5% to 51.3% of cells activated):

GFGDGPALCTILDSWNEDLFSGLPANPDLYRECRFLSTLPGDVVAWGDAHAPDAPIDIRAHGSAPFPSLPARREGLPAY

Extended repression domain from residues 121 to 230:

APDRAPIDIRAHGSAPFPSLPARREGLPAYCAALTRFFESELRAAREESYRRVLANFCASALYRYLRASTRQLHRQAALKGRPRDLQEMLRASVAERYYRET  
ARLARVMFLH

Max tile of repression domain from residues 131 to 210 (estimated 33.6% to 37.9% of cells repressed):

AHGSAPFPSLPARREGLPAYCAALTRFFESELRAAREESYRRVLANFCASALYRYLRASTRQLHRQAALKGRPRDLQEMLRA

Extended repression domain from residues 21 to 120:

RRPTGGAEELPDAATAPRPYATTRLSQAQIMPPPPVPIPPAALYNRLLEDLGFGDGPALCTILDSWNEDLFSGLPANPDLYRECRFLSTLPGDVVAWGDAH

Max tile of repression domain from residues 21 to 100 (estimated 23.8% to 28.1% of cells repressed):

RRPTGGAEELPDAATAPRPYATTRLSQAQIMPPPPVPIPPAALYNRLLEDLGFGDGPALCTILDSWNEDLFSGLPANPDLY

Extended repression domain from residues 291 to 390:

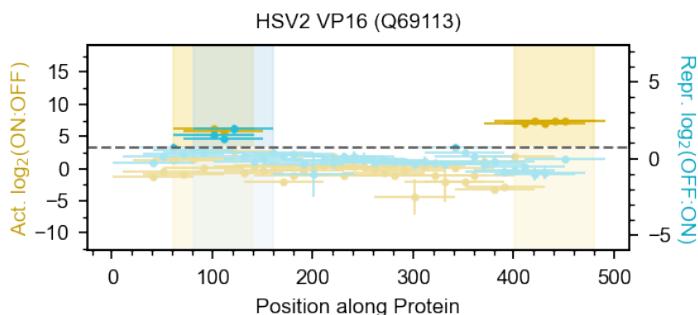
ARLRELNHVRERLNPLIRSAATEEPGAALTAAPALQTQQARSSGYFMTLIRVKLDAYSEGSAGSEGAEVLREHAYSRRERTNYGSSIEGLLELPDDAD

Max tile of repression domain from residues 291 to 370 (estimated 23.7% to 25.0% of cells repressed):

ARLRELNHVRERLNPLIRSAATEEPGAALTAAPALQTQQARSSGYFMTLIRVKLDAYSEGSAGSEGAEVLREHAYSRR

## HSV2 VP16 (Q69113)

Gene: UL48 ; Protein Family: VP16



Extended activation domain from residues 371 to 490:

YGSTIEGLLDLPPDDDAPEAGLVAPRMSFLSAGQRPRRLSTTAPITDVSLGDELRLDGEEVDMTPADALDDFDLEMLGDVESPGMTHDGVSYGALD  
VDDFEFEQMFTDALGIDDFGG

Max tile of activation domain from residues 401 to 480 (estimated 75.1% to 81.6% of cells activated):

LSAGQRPRRLSTTAPITDVSLGDELRLDGEEVDMTPADALDDFDLEMLGDVESPGMTHDGVSYGALDVDDFEFEQMFT

Extended activation domain from residues 61 to 150:

NRLLLDDLGFSAGPALCTMLDTWNEDLFSGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFPTLPATRDELPYYEA

Max tile of activation domain from residues 61 to 140 (estimated 59.6% to 61.4% of cells activated):

NRLLLDDLGFSAGPALCTMLDTWNEDLFSGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFPTLPAT

Extended repression domain from residues 61 to 160:

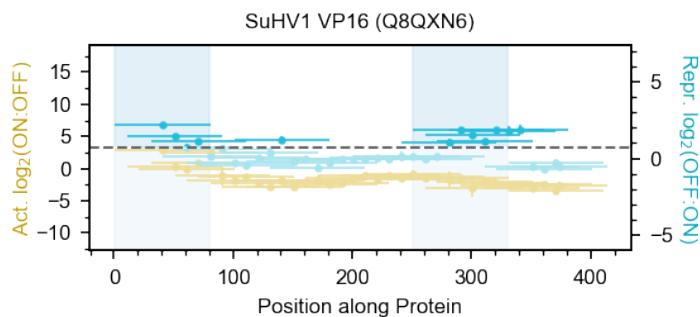
NRLLLDDLGFSAGPALCTMLDTWNEDLFSGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFPTLPATRDELPYYEAMAQFFRGELR

Max tile of repression domain from residues 81 to 160 (estimated 29.4% to 44.7% of cells repressed):

TWNEDLFSGFPTNADMYRECKFLSTLPSDVIDWGDAHVPERSPIDIRAHGDVAFPTLPATRDELPYYEAMAQFFRGELR

SuHV1 VP16 (Q8QXN6)

Gene: UL48 ; Protein Family: VP16



Extended repression domain from residues 1 to 110:

MRDEECVVAFDEALLGGAAPGRPPVAVPRAASPDALYQRLLISDLAFDEGPALLGAMERWNEDLFSCLPGNEDLYARLVMLSASADEVAAQVRAPTA  
DASVDLGVPGAEPEP

Max tile of repression domain from residues 1 to 80 (estimated 40.0% to 46.1% of cells repressed):

MRDEECVVAFDEALLGGAAPGRPPVAVPRAASPDALYQRLLISDLAFDEGPALLGAMERWNEDLFSCLPGNEDLYARLV

Extended repression domain from residues 241 to 380:

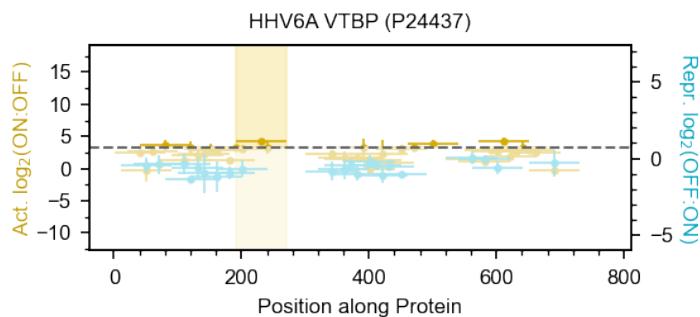
VVLLSGAPVPAQLRAVNHRRRELGLPLVRAGLIEEDGADLVEEPPFSaalPRAAGYLHQVRIKMEAYSREYRDHTYCRPPSPVASYGSTAEALLPPPS  
PSAVLPCDPTPPPARVSAAPLITTVTLEAEEDGALTAAAP

Max tile of repression domain from residues 251 to 330 (estimated 35.7% to 35.9% of cells repressed):

AAQLRAVNHRRRELGLPLVRAGLIEEDGADLVEEPPFSaalPRAAGYLHQVRIKMEAYSREYRDHTYCRPPSPVASYGS

HHV6A VTBP (P24437)

Gene: U58 ; Protein Family: VTBP



Extended activation domain from residues 191 to 280:

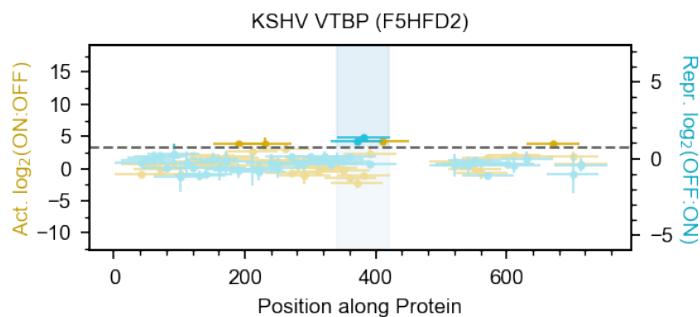
PYFLCYLCRHLTVIEIEQCTNDLISLLGPKVVAQRVIIHFKLLFGFRHKPHIGTVDSWFENFFMLELHKLWLTVKHNRVTTDFFNVYE

Max tile of activation domain from residues 191 to 270 (estimated 20.5% to 30.0% of cells activated):

PYFLCYLCRHLTVIEIEQCTNDLISLLGPKVVAQRVIIHFKLLFGFRHKPHIGTVDSWFENFFMLELHKLWLTVKHNRV

KSHV VTBP (F5HFD2)

Gene: ORF24 ; Protein Family: VTBP



Extended repression domain from residues 331 to 420:

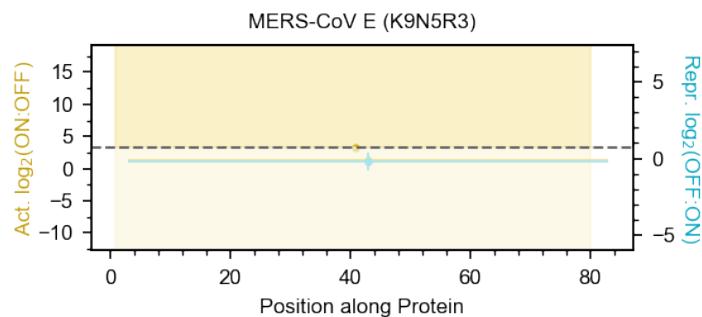
MCMAVADCIGHSCSGLHPCANFLGTHETPRLLAATLSRIRYAPKDRRAAMKGNLQACFQRYAATDARTLGSSTVSDMLEPTKHVSLENFK

Max tile of repression domain from residues 341 to 420 (estimated 24.2% to 25.3% of cells repressed):

HSCSGLHPCANFLGTHETPRLLAATLSRIRYAPKDRRAAMKGNLQACFQRYAATDARTLGSSTVSDMLEPTKHVSLENFK

MERS-CoV E (K9N5R3)

Gene: E ; Protein Family: E



Extended activation domain from residues 1 to 80:

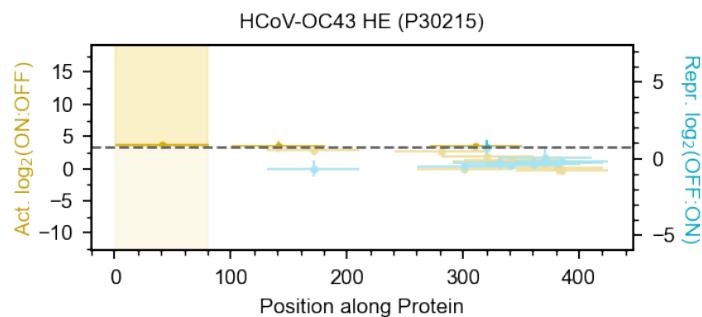
MLPFVQERIGLFIVNFFIFTVVCAITLLVCMAFLTATRLCVQCMTGFNTLLVQPALYLYNTGRSVYVKFQDSKPPLPPDE

Max tile of activation domain from residues 1 to 80 (estimated 12.7% to 16.0% of cells activated):

MLPFVQERIGLFIVNFFIFTVVCAITLLVCMAFLTATRLCVQCMTGFNTLLVQPALYLYNTGRSVYVKFQDSKPPLPPDE

HCoV-OC43 HE (P30215)

Gene: HE ; Protein Family: HE



Extended activation domain from residues 1 to 80:

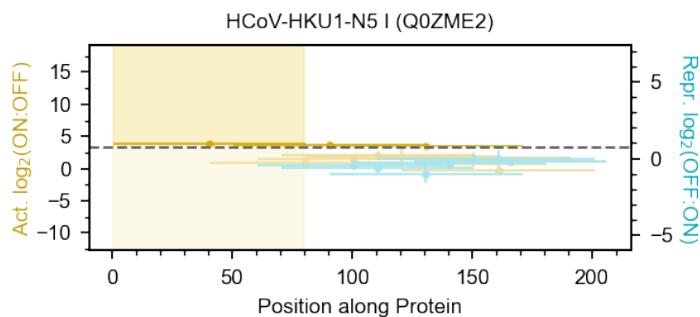
MFLLPRFILVSCIIGSLGFYNPPTNVVSHVNGDWFLFGDSRSDCNHIVNINPHNYSYMDLNPVLCDSGKISSKAGNSIFR

Max tile of activation domain from residues 1 to 80 (estimated 14.0% to 20.6% of cells activated):

MFLLPRFILVSCIIGSLGFYNPPTNVVSHVNGDWFLFGDSRSDCNHIVNINPHNYSYMDLNPVLCDSGKISSKAGNSIFR

HCoV-HKU1-N5 I (Q0ZME2)

Gene: I ; Protein Family: I



Extended activation domain from residues 1 to 80:

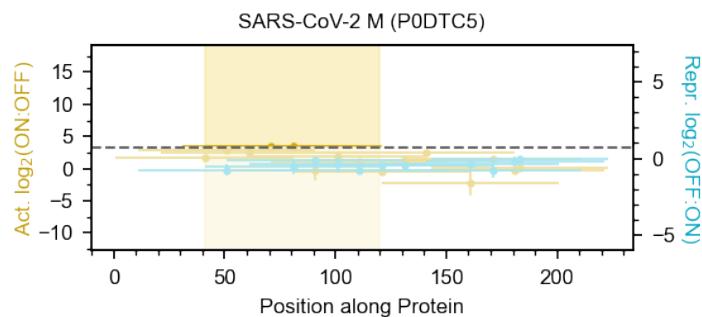
MLEVEAPLEIVQESSRKLLGLTNLSEAIKPIIEAENPNQNSLCLLNHKETLSHIIIPGSLGLPNFKKVETLNFQMVKEYPL

Max tile of activation domain from residues 1 to 80 (estimated 20.5% to 21.4% of cells activated):

MLEVEAPLEIVQESSRKLLGLTNLSEAIKPIIEAENPNQNSLCLLNHKETLSHIIIPGSLGLPNFKKVETLNFQMVKEYPL

SARS-CoV-2 M (P0DTC5)

Gene: M ; Protein Family: M



Extended activation domain from residues 31 to 120:

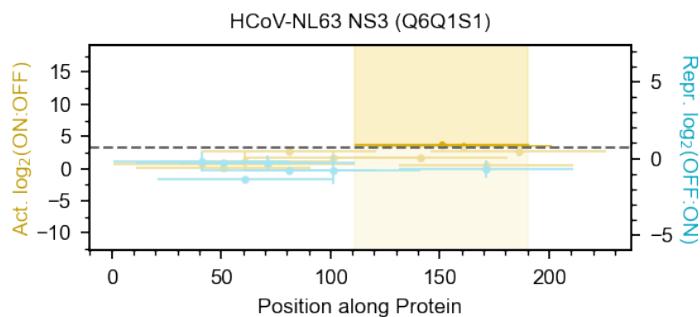
WICLLQFAYANRNRFLYIILKLIFLWLLWPVTLACVLAAYRINWITGGIAIAMACLVGLMWLSYFIASFRLFARTRSMWSFNPETNILL

Max tile of activation domain from residues 41 to 120 (estimated 11.4% to 21.7% of cells activated):

NRNRFLYIILKLIFLWLLWPVTLACVLAAYRINWITGGIAIAMACLVGLMWLSYFIASFRLFARTRSMWSFNPETNILL

HCoV-NL63 NS3 (Q6Q1S1)

Gene: NS3 ; Protein Family: NS3



Extended activation domain from residues 111 to 200:

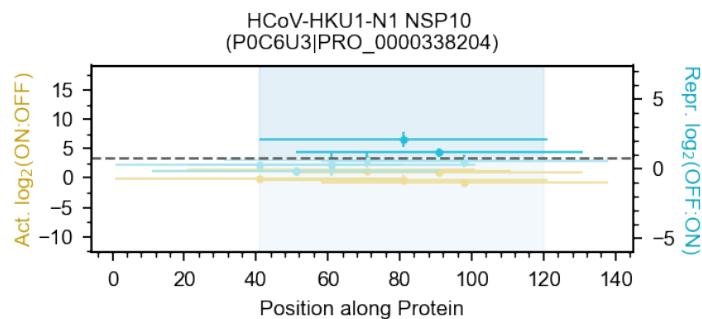
GYYAYLYKNFSFVLNFNVTKLCFVSGKCWYLEQSFYENRFAAIYGGDHYVVLGGETITFVSFDDLYVAIRGSCEKNLQLMRKVDSLNGAVI

Max tile of activation domain from residues 111 to 190 (estimated 11.9% to 26.0% of cells activated):

GYYAYLYKNFSFVLNFNVTKLCFVSGKCWYLEQSFYENRFAAIYGGDHYVVLGGETITFVSFDDLYVAIRGSCEKNLQLMR

HCoV-HKU1-N1 NSP10 (P0C6U3|PRO\_0000338204)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 137:

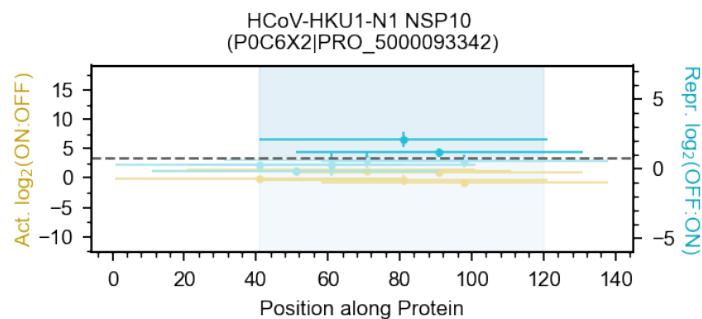
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCGFWRDGSCSCVG  
SSVAVQ

Max tile of repression domain from residues 41 to 120 (estimated 27.4% to 59.6% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCG

HCoV-HKU1-N1 NSP10 (P0C6X2|PRO\_5000093342)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 137:

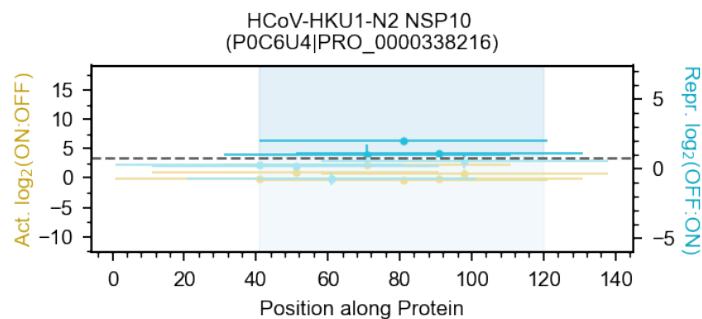
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCGFWRDGSCSCVG  
SSVAVQ

Max tile of repression domain from residues 41 to 120 (estimated 27.4% to 59.6% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCG

HCoV-HKU1-N2 NSP10 (P0C6U4|PRO\_0000338216)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 130:

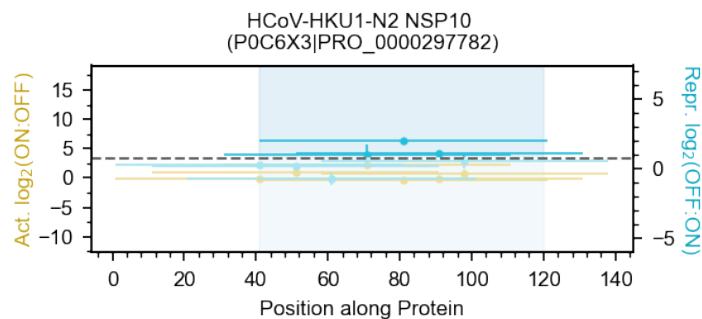
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVGGLCKLRGKFVQVPLGIKDPILYVLTHDVCQVCGFWRDGSCSCV

Max tile of repression domain from residues 41 to 120 (estimated 35.6% to 41.3% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVGGLCKLRGKFVQVPLGIKDPILYVLTHDVCQVCG

HCoV-HKU1-N2 NSP10 (P0C6X3|PRO\_0000297782)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 130:

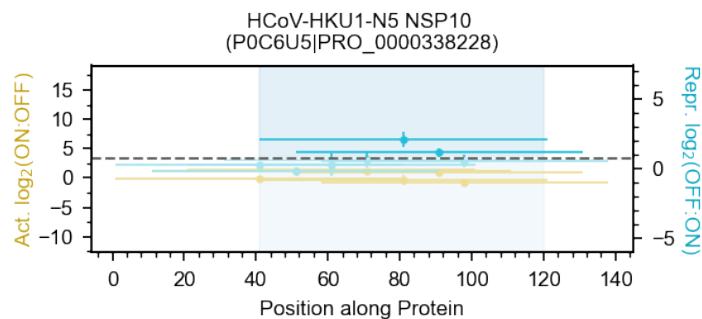
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVGGLCKLRGKFVQVPLGIKDPILYVLTHDVCQVCGFWRDGSCSCV

Max tile of repression domain from residues 41 to 120 (estimated 35.6% to 41.3% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVGGLCKLRGKFVQVPLGIKDPILYVLTHDVCQVCG

HCoV-HKU1-N5 NSP10 (P0C6U5|PRO\_0000338228)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 137:

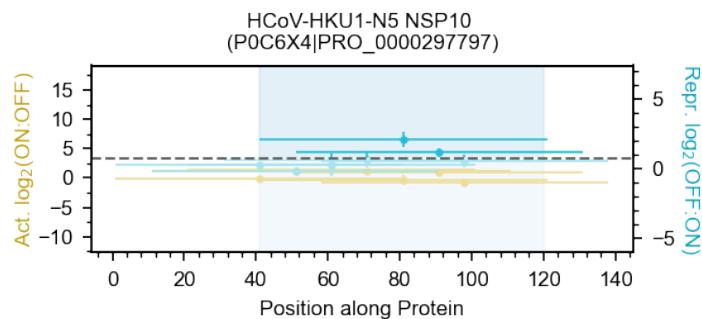
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCGFWRDGSCSCVG  
SSVAVQ

Max tile of repression domain from residues 41 to 120 (estimated 27.4% to 59.6% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCG

HCoV-HKU1-N5 NSP10 (P0C6X4|PRO\_0000297797)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 31 to 137:

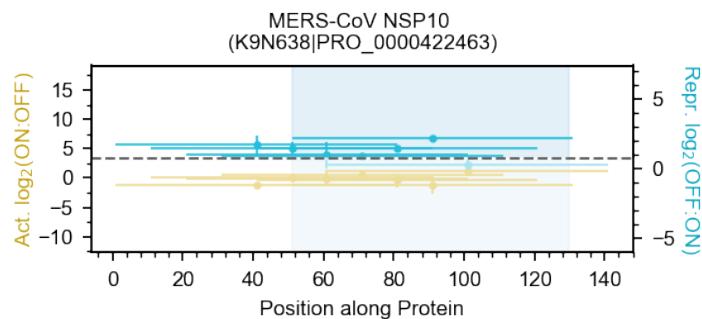
IQQGGVPIINCVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCGFWRDGSCSCVG  
SSVAVQ

Max tile of repression domain from residues 41 to 120 (estimated 27.4% to 59.6% of cells repressed):

CVKMLCDHAGTGMAITIKPEATINQDSYGGASVCIYCRARVEHPDVDGICKLRGKFVQVPLGIKDPILEVLTHDVCQVCG

MERS-CoV NSP10 (K9N638|PRO\_0000422463)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 1 to 130:

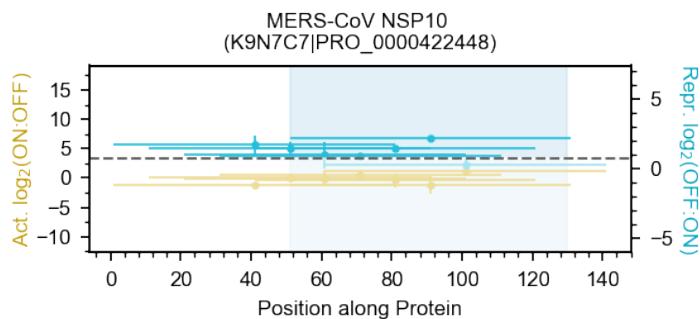
AGSNTEFASNSSVLSLVNFTVDPQKAYLDFVNAGGAPLTNCVKMLTPKTGTGIAISVKPESTADQETYGGASVCLYCR  
AHIEHPDVSGVCKYKGKFVQIPAQCVRDPVGFLSNTPCNVCQYWIGYGCNC

Max tile of repression domain from residues 51 to 130 (estimated 38.0% to 47.8% of cells repressed):

TGIAISVKPESTADQETYGGASVCLYCR  
AHIEHPDVSGVCKYKGKFVQIPAQCVRDPVGFLSNTPCNVCQYWIGYGCNC

MERS-CoV NSP10 (K9N7C7|PRO\_0000422448)

Gene: NSP10 ; Protein Family: NSP10



Extended repression domain from residues 1 to 130:

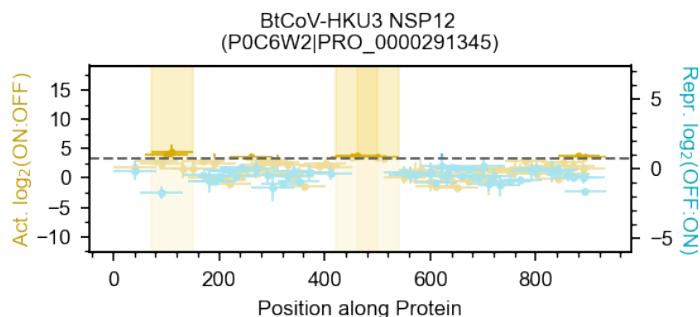
AGSNTEFASNSSVLSLVNFTVDPQKAYLDFVNAGGAPLTNCVKMLTPKTGTGIAISVKPESTADQETYGGASVCLYCR  
AHIEHPDVSGVCKYKGKFVQIPAQCVRDPVGFCLSNTPCNVCQYWIGYGCNC

Max tile of repression domain from residues 51 to 130 (estimated 38.0% to 47.8% of cells repressed):

TGIAISVKPESTADQETYGGASVCLYCR  
AHIEHPDVSGVCKYKGKFVQIPAQCVRDPVGFC  
LSNTPCNVCQYWIGYGCNC

## BtCoV-HKU3 NSP12 (P0C6W2|PRO\_0000291345)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 61 to 150:

EEGNLLDSYFVVKRHTMSNYQHEETIYNLIKECPAVAVHDFFKFRVDGDMVPHISRQLTKYTMADLVYALRFDEGNCDTLKEILVTYN

Max tile of activation domain from residues 71 to 150 (estimated 12.7% to 50.6% of cells activated):

VVKRHTMSNYQHEETIYNLIKECPAVAVHDFFKFRVDGDMVPHISRQLTKYTMADLVYALRFDEGNCDTLKEILVTYN

Extended activation domain from residues 411 to 500:

KPGNFKDIFYDFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDK

Max tile of activation domain from residues 421 to 500 (estimated 15.1% to 22.9% of cells activated):

DFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDK

Extended activation domain from residues 461 to 550:

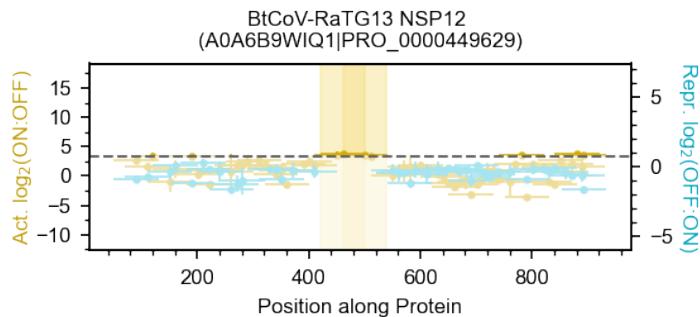
PTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNWKWGKARLYYDSMSYEDQDALFAYTKRNVIPITQMNLKYAISA

Max tile of activation domain from residues 461 to 540 (estimated 15.5% to 17.7% of cells activated):

PTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNWKWGKARLYYDSMSYEDQDALFAYTKRNVIPIT

BtCoV-RaTG13 NSP12 (A0A6B9WIQ1|PRO\_0000449629)

Gene: NSP12 ; Protein Family: NSP12



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Extended activation domain from residues 411 to 500:

KPGNFNKDFYDFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDK

Max tile of activation domain from residues 421 to 500 (estimated 15.1% to 22.9% of cells activated):

DFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDK

---

Extended activation domain from residues 461 to 550:

PTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNKGKARLYYDSMSYEDQDALFAYTKRNVIPITQMNLKYAISA

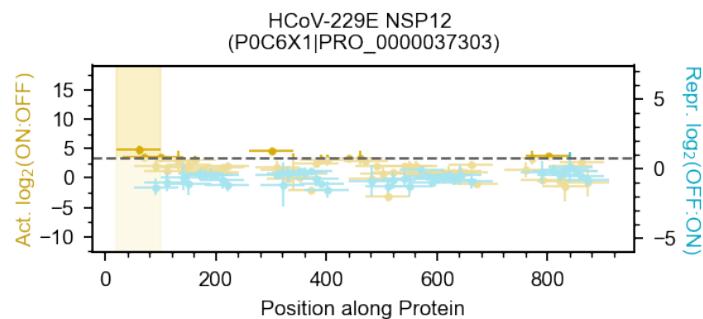
Max tile of activation domain from residues 461 to 540 (estimated 15.5% to 17.7% of cells activated):

PTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNKGKARLYYDSMSYEDQDALFAYTKRNVIPIT

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HCoV-229E NSP12 (P0C6X1|PRO\_0000037303)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 21 to 110:

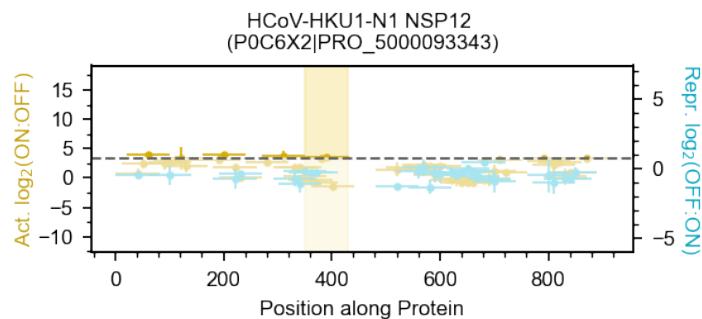
CNGTDIDYCVRAFDVYNKDASFIGKNLKSNCVRFKNVDKDDAFYIVKRCIKSVMMDHEQSMYNNLLKGCAVAKHDFFTWH

Max tile of activation domain from residues 21 to 100 (estimated 21.8% to 48.8% of cells activated):

CNGTDIDYCVRAFDVYNKDASFIGKNLKSNCVRFKNVDKDDAFYIVKRCIKSVMMDHEQSMYNNLLKGCAVAKHDFFTWH

HCoV-HKU1-N1 NSP12 (P0C6X2|PRO\_5000093343)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 341 to 430:

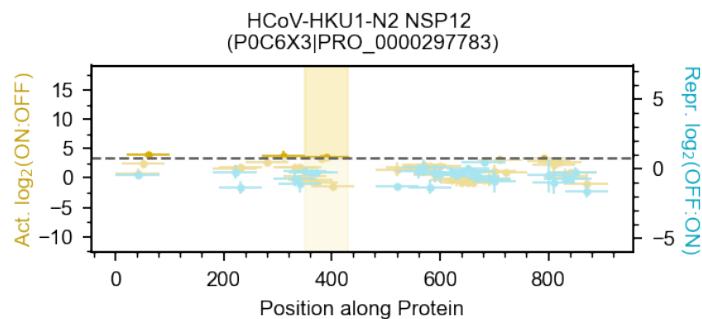
GYHYKELGVVMNLDVDTHR~~Y~~RSLKD~~LLL~~YAADPAMHV~~A~~SASALLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS~~K~~GLFKEGST

Max tile of activation domain from residues 351 to 430 (estimated 13.9% to 21.5% of cells activated):

MNLDVDTHR~~Y~~RSLKD~~LLL~~YAADPAMHV~~A~~SASALLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS~~K~~GLFKEGST

HCoV-HKU1-N2 NSP12 (P0C6X3|PRO\_0000297783)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 341 to 430:

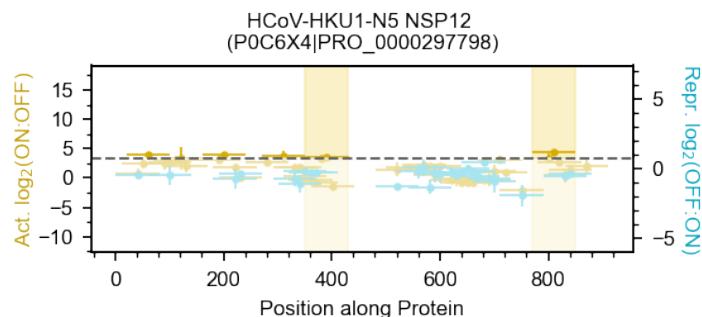
GYHYKELGVVMNLDVDTHR<sub>R</sub>LSLKDLLLYAADPAMHV<sub>A</sub>SASALLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS<sub>K</sub>GLFKEGST

Max tile of activation domain from residues 351 to 430 (estimated 13.9% to 21.5% of cells activated):

MNLDVDTHR<sub>R</sub>LSLKDLLLYAADPAMHV<sub>A</sub>SASALLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS<sub>K</sub>GLFKEGST

HCoV-HKU1-N5 NSP12 (P0C6X4|PRO\_0000297798)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 761 to 850:

CYNSDYANKGYIANISAFQQVLYYQNNVFMSESKCWVENDITNGPHEFCSQHTMLVKIDG DYV YLPYPDPSRILGAGCFVDDLKTDSVL

Max tile of activation domain from residues 771 to 850 (estimated 26.0% to 29.6% of cells activated):

YIANISAFQQVLYYQNNVFMSESKCWVENDITNGPHEFCSQHTMLVKIDG DYV YLPYPDPSRILGAGCFVDDLKTDSVL

Extended activation domain from residues 341 to 430:

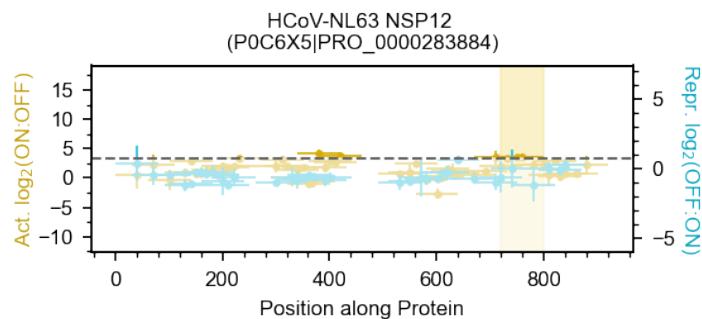
GYHYKELGVVMNLDVDTHRYRLSLKDLLYAADPAMHV ASAS ALLDLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS KGLFKEGST

Max tile of activation domain from residues 351 to 430 (estimated 13.9% to 21.5% of cells activated):

MNLVDVDTHRYRLSLKDLLYAADPAMHV ASAS ALLDLRTCCFSVAITSGIKFQTVKPGNFNQDFYEFVKS KGLFKEGST

HCoV-NL63 NSP12 (P0C6X5|PRO\_0000283884)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 711 to 800:

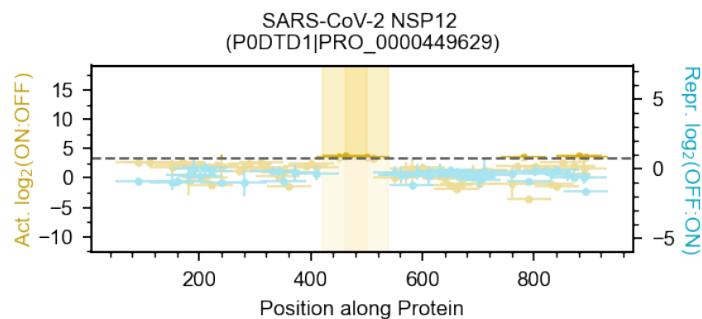
NNNVNRDLQRRLYDNCYRLTSVEESFIDDYYGYLRKHFSSMMILSDDGVVCYNKDYAEELGYIADISAFKATLYYQNNVFMSTSKCWVEEDL

Max tile of activation domain from residues 721 to 800 (estimated 13.0% to 23.9% of cells activated):

RLYDNCYRLTSVEESFIDDYYGYLRKHFSSMMILSDDGVVCYNKDYAEELGYIADISAFKATLYYQNNVFMSTSKCWVEEDL

SARS-CoV-2 NSP12 (P0DTD1|PRO\_0000449629)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 411 to 500:

KPGNFNKDFYDFAVSKGFFKEGSSVELKHFFFQAQDGNAAISDYDYYRYNLPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDK

Max tile of activation domain from residues 421 to 500 (estimated 15.1% to 22.9% of cells activated):

DFAVSKGFFKEGSSVELKHFFFQAQDGNAAISDYDYYRYNLPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDK

Extended activation domain from residues 461 to 550:

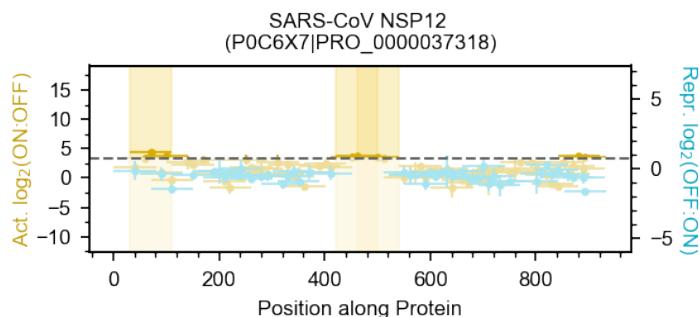
PTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNKGKARLYYDSMSYEDQDALFAYTKRNVIPITQMNLKYAISA

Max tile of activation domain from residues 461 to 540 (estimated 15.5% to 17.7% of cells activated):

PTMCDIRQLLFVVEVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNKGKARLYYDSMSYEDQDALFAYTKRNVIPIT

## SARS-CoV NSP12 (P0C6X7|PRO\_0000037318)

Gene: NSP12 ; Protein Family: NSP12



Extended activation domain from residues 21 to 110:

PCGTGTSTDVVYRAFDIYNEKAVGFAKFLKTNCRCFQEKEEGNLLDSYFVVKRHTMSNYQHEETIYNLVKDCPAVAVHDFFKFRVDGDM

Max tile of activation domain from residues 31 to 110 (estimated 21.9% to 34.0% of cells activated):

VYRAFDIYNEKAVGFAKFLKTNCRCFQEKEEGNLLDSYFVVKRHTMSNYQHEETIYNLVKDCPAVAVHDFFKFRVDGDM

Extended activation domain from residues 411 to 500:

KPGNFNKDFYDFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDK

Max tile of activation domain from residues 421 to 500 (estimated 15.1% to 22.9% of cells activated):

DFAVSKGFFKEGSSVELKHFFFQAQDGNAIASDYDYYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDK

Extended activation domain from residues 461 to 550:

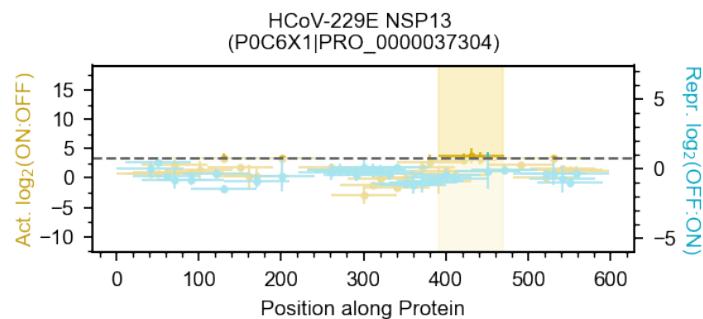
PTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNWKWGKARLYYDSMSYEDQDALFAYTKRNVIPITITQMNLKYAISA

Max tile of activation domain from residues 461 to 540 (estimated 15.5% to 17.7% of cells activated):

PTMCDIRQLLFVVEVVDKYFDCYDGGCINANQVIVNNLDKSAGFPFNWKWGKARLYYDSMSYEDQDALFAYTKRNVIPITIT

HCoV-229E NSP13 (P0C6X1|PRO\_0000037304)

Gene: NSP13 ; Protein Family: NSP13



Extended activation domain from residues 391 to 480:

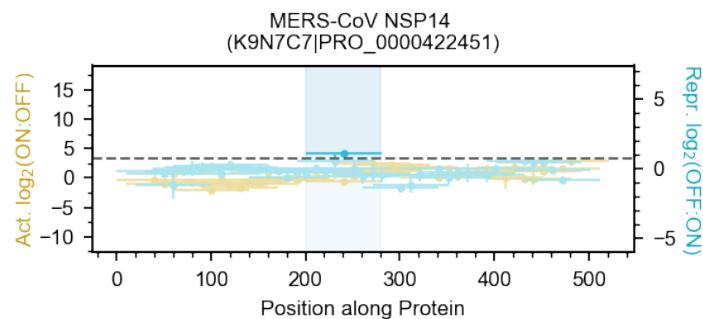
RISYKHIVYVGDPQQLPAPRVLISKGVMEPIDYNVVTQRMCAIGPDVFLHKCYRCPAEIVNTVSELVYENKFVPVKEASKQCFCKIFERGS

Max tile of activation domain from residues 391 to 470 (estimated 8.0% to 37.3% of cells activated):

RISYKHIVYVGDPQQLPAPRVLISKGVMEPIDYNVVTQRMCAIGPDVFLHKCYRCPAEIVNTVSELVYENKFVPVKEASK

MERS-CoV NSP14 (K9N7C7|PRO\_0000422451)

Gene: NSP14 ; Protein Family: NSP14



Extended repression domain from residues 191 to 280:

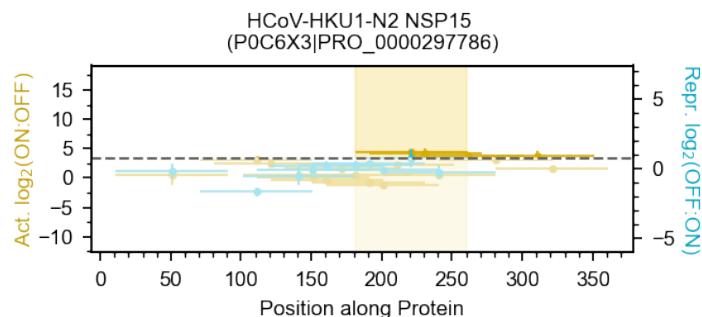
ELTSASYFCKIGKEQKCCMCNRRAAYSSPLQSYACWTHSCGYDYVYNPFFDVQQWGYVGNLATNHDRYCSVHQGAHVASNDAIMTRCL

Max tile of repression domain from residues 201 to 280 (estimated 19.7% to 23.6% of cells repressed):

IGKEQKCCMCNRRAAYSSPLQSYACWTHSCGYDYVYNPFFDVQQWGYVGNLATNHDRYCSVHQGAHVASNDAIMTRCL

HCoV-HKU1-N2 NSP15 (P0C6X3|PRO\_0000297786)

Gene: NSP15 ; Protein Family: NSP15



Extended activation domain from residues 181 to 270:

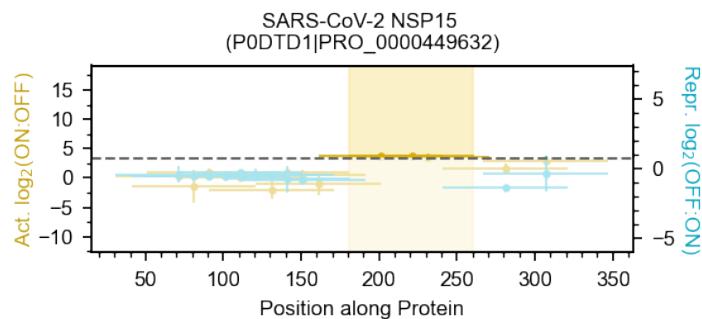
DVIFSRADSLSPSHYWSPQGNLGGNCAGNASGNDALARFTIFTQSRVLSTFEPRSDLERDFIDMEDSLFIAKYGLEDYAFDHIVYGSFNY

Max tile of activation domain from residues 181 to 260 (estimated 28.6% to 30.2% of cells activated):

DVIFSRADSLSPSHYWSPQGNLGGNCAGNASGNDALARFTIFTQSRVLSTFEPRSDLERDFIDMEDSLFIAKYGLEDYAF

SARS-CoV-2 NSP15 (P0DTD1|PRO\_0000449632)

Gene: NSP15 ; Protein Family: NSP15



Extended activation domain from residues 181 to 270:

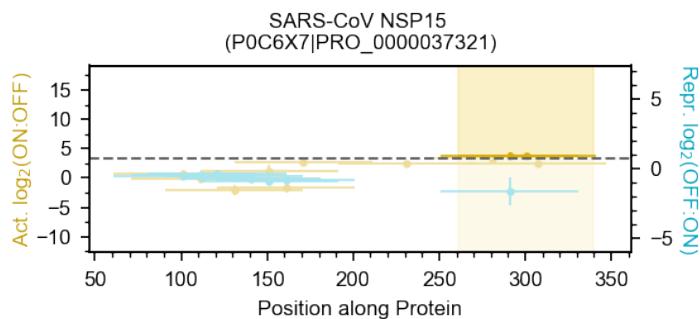
KVDGVVQQLPETYFTQSRNLQEFKPRSQMEIDFLELAMDEFIERYKLEGYAFEHIVYGDFSHSQLGLHLLIGLAKRFKESPFELEDFIP

Max tile of activation domain from residues 181 to 260 (estimated 16.2% to 21.0% of cells activated):

KVDGVVQQLPETYFTQSRNLQEFKPRSQMEIDFLELAMDEFIERYKLEGYAFEHIVYGDFSHSQLGLHLLIGLAKRFKE

SARS-CoV NSP15 (P0C6X7|PRO\_0000037321)

Gene: NSP15 ; Protein Family: NSP15



Extended activation domain from residues 241 to 340:

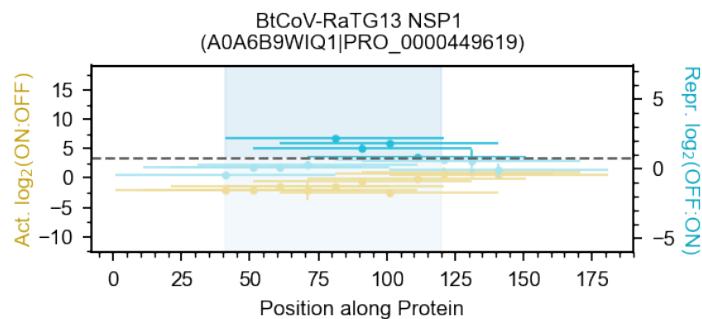
SHGQLGGLHLMIGLAKRSQDSPLKLED**FIPMDSTVKNYFITDAQTGSSKCVCSVIDLLLDDFVEIIKSQDLSVISKKVTIDYAEISFMLWCKDGHVET**

Max tile of activation domain from residues 261 to 340 (estimated 14.9% to 23.2% of cells activated):

**SPLKLED**FIPMDSTVKNYFITDAQTGSSKCVCSVIDLLLDDFVEIIKSQDLSVISKKVTIDYAEISFMLWCKDGHVET****

BtCoV-RaTG13 NSP1 (A0A6B9WIQ1|PRO\_0000449619)

Gene: NSP1 ; Protein Family: NSP1



Extended repression domain from residues 41 to 160:

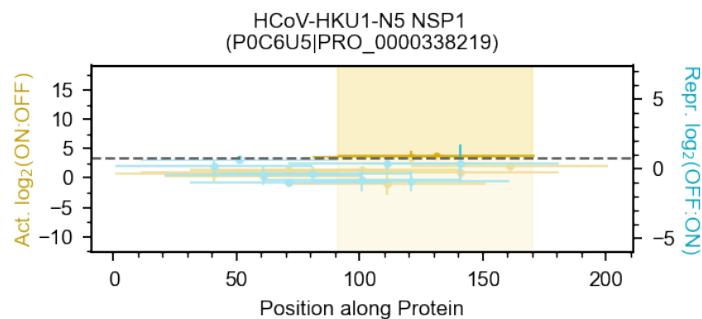
EARQHLKDGTCGLVEKGVLVPQLEQPYVFIKRSDARTAPHGHVMVELVAELNGIQYGRSGETLGVLPYVGETPVVYRKVLLRKNGNKGAGGHSYGA  
DLKSFDLGDELGTDPYEDFQEN

Max tile of repression domain from residues 41 to 120 (estimated 42.3% to 46.4% of cells repressed):

EARQHLKDGTCGLVEKGVLVPQLEQPYVFIKRSDARTAPHGHVMVELVAELNGIQYGRSGETLGVLPYVGETPVVYRK

HCoV-HKU1-N5 NSP1 (P0C6U5|PRO\_0000338219)

Gene: NSP1 ; Protein Family: NSP1



Extended activation domain from residues 81 to 170:

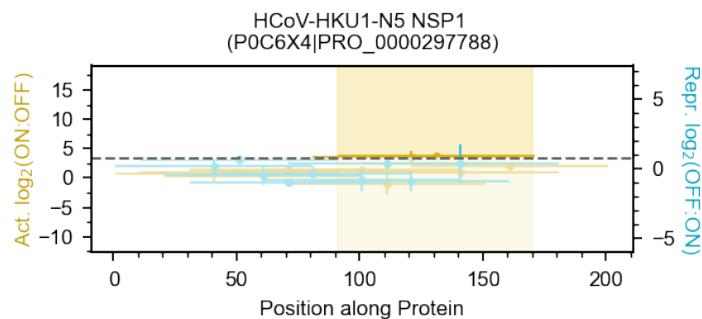
FVHEDLHVVEVLTAVKSGTAILIKSPLHSLGGFPKGYVMGLFRSYKTKRYVVHLSMTTSTTNFGEDFFGWIVPFGFMPSYVHKWFQF

Max tile of activation domain from residues 91 to 170 (estimated 17.0% to 20.3% of cells activated):

VLTAVKSGTAILIKSPLHSLGGFPKGYVMGLFRSYKTKRYVVHLSMTTSTTNFGEDFFGWIVPFGFMPSYVHKWFQF

HCoV-HKU1-N5 NSP1 (P0C6X4|PRO\_0000297788)

Gene: NSP1 ; Protein Family: NSP1



Extended activation domain from residues 81 to 170:

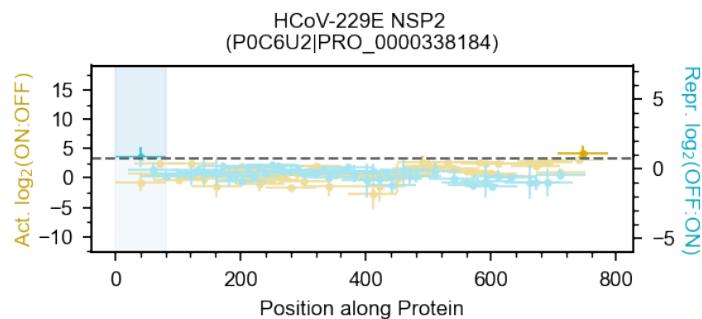
FVHEDLHVVEVLTAVKSGTAILIKSPLHSLGGFPKGYVMGLFRSYKTKRYVVHLSMTTSTTNFGEDFFGWIVPFGFMPSYVHKWFQF

Max tile of activation domain from residues 91 to 170 (estimated 17.0% to 20.3% of cells activated):

VLTAVKSGTAILIKSPLHSLGGFPKGYVMGLFRSYKTKRYVVHLSMTTSTTNFGEDFFGWIVPFGFMPSYVHKWFQF

HCoV-229E NSP2 (P0C6U2|PRO\_0000338184)

Gene: NSP2 ; Protein Family: NSP2



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Extended repression domain from residues 1 to 80:

NVTYTDQYLCGADGKPVMSEDLWQFVDHFGENEIIINGHTYVCAWLTKRKPLDYKRQNNLAIIEEEIYVHGDALHTLRNG

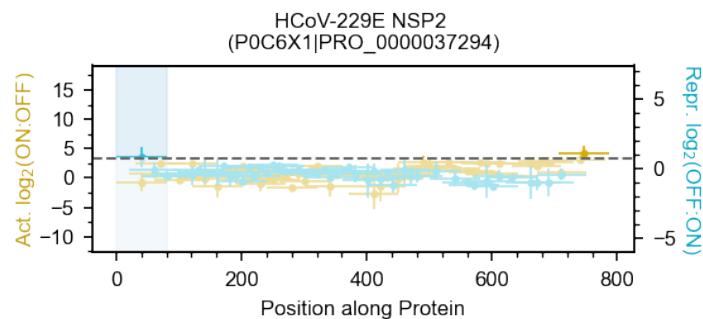
Max tile of repression domain from residues 1 to 80 (estimated 15.4% to 28.2% of cells repressed):

NVTYTDQYLCGADGKPVMSEDLWQFVDHFGENEIIINGHTYVCAWLTKRKPLDYKRQNNLAIIEEEIYVHGDALHTLRNG

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HCoV-229E NSP2 (P0C6X1|PRO\_0000037294)

Gene: NSP2 ; Protein Family: NSP2



Extended repression domain from residues 1 to 80:

NTYTDQYLCGADGKPVMSEDLWQFVDHFGENEIIINGHTYVCAWLTKRKPLDYKRQNNLAIIEEEYVHGDALHTLRNG

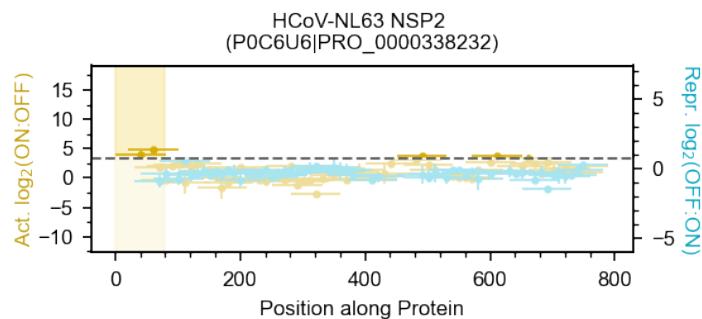
Max tile of repression domain from residues 1 to 80 (estimated 15.4% to 28.2% of cells repressed):

NTYTDQYLCGADGKPVMSEDLWQFVDHFGENEIIINGHTYVCAWLTKRKPLDYKRQNNLAIIEEEYVHGDALHTLRNG

Other Tiling Screen Data from Ludwig, C.H. et al. 2023

HCoV-NL63 NSP2 (P0C6U6|PRO\_0000338232)

Gene: NSP2 ; Protein Family: NSP2



Extended activation domain from residues 1 to 80:

SVVFVDKYMCGFDGKPVLPKNMWEFRDYFNNNTDSIVGGVTYQLAWDVIRKDLSYEQQNVLAIIESIHYLGTTGHTLKSG

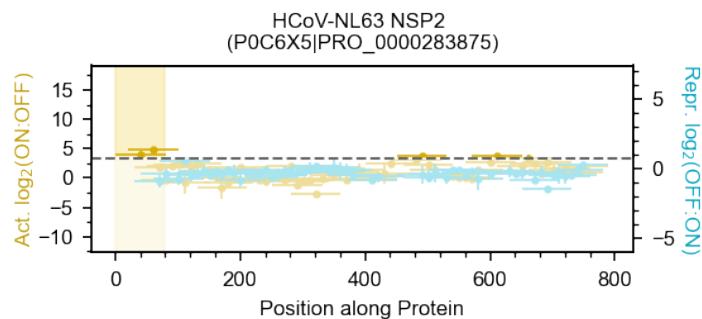
Max tile of activation domain from residues 1 to 80 (estimated 16.9% to 30.9% of cells activated):

SVVFVDKYMCGFDGKPVLPKNMWEFRDYFNNNTDSIVGGVTYQLAWDVIRKDLSYEQQNVLAIIESIHYLGTTGHTLKSG

Other Tiling Screen Data from Ludwig, C.H. et al. 2023

HCoV-NL63 NSP2 (P0C6X5|PRO\_0000283875)

Gene: NSP2 ; Protein Family: NSP2



Extended activation domain from residues 1 to 80:

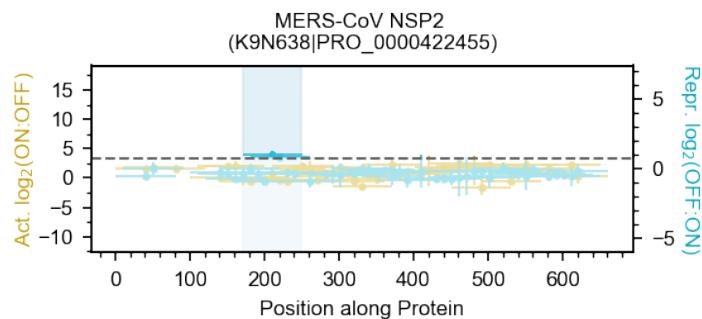
SVVFVDKYMCGFDGKPVLPKNMWEFRDYFNNNTDSIVGGVTYQLAWDVIRKDLSYEQQNVLAIESIHYLGTTGHTLKSG

Max tile of activation domain from residues 1 to 80 (estimated 16.9% to 30.9% of cells activated):

SVVFVDKYMCGFDGKPVLPKNMWEFRDYFNNNTDSIVGGVTYQLAWDVIRKDLSYEQQNVLAIESIHYLGTTGHTLKSG

MERS-CoV NSP2 (K9N638|PRO\_0000422455)

Gene: NSP2 ; Protein Family: NSP2



Extended repression domain from residues 171 to 260:

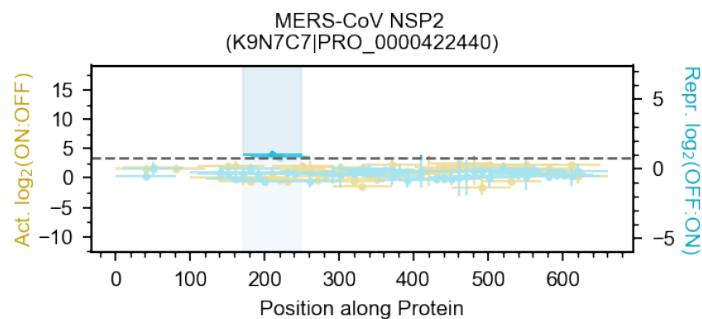
TANDVEVQSSGMIKPNALLCATCPFAKGDSCSSNCKHSVAQLVSYLSERCNVIADSKSFTLIFGGVAYAYFGCEEGLMYFVPRAKSVVSR

Max tile of repression domain from residues 171 to 250 (estimated 18.0% to 23.6% of cells repressed):

TANDVEVQSSGMIKPNALLCATCPFAKGDSCSSNCKHSVAQLVSYLSERCNVIADSKSFTLIFGGVAYAYFGCEEGLMYF

MERS-CoV NSP2 (K9N7C7|PRO\_0000422440)

Gene: NSP2 ; Protein Family: NSP2



Extended repression domain from residues 171 to 260:

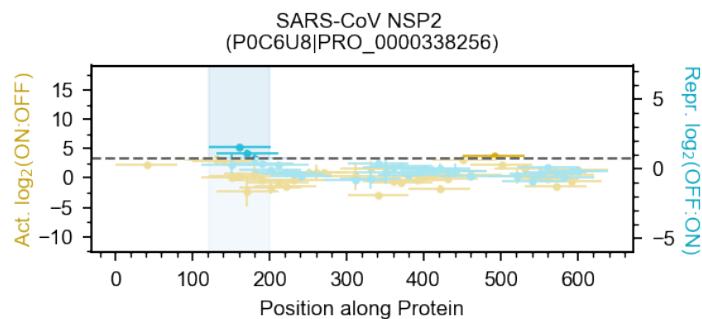
TANDVEVQSSGMIKPNALLCATCPFAKGDSCSNCKHSVAQLVSYLSERCNVIADSKSFTLIFGGVAYAYFGCEEGTMYFVPRAKSVVSR

Max tile of repression domain from residues 171 to 250 (estimated 18.0% to 23.6% of cells repressed):

TANDVEVQSSGMIKPNALLCATCPFAKGDSCSNCKHSVAQLVSYLSERCNVIADSKSFTLIFGGVAYAYFGCEEGTMYF

SARS-CoV NSP2 (P0C6U8|PRO\_0000338256)

Gene: NSP2 ; Protein Family: NSP2



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Extended repression domain from residues 121 to 220:

RSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTCDFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSNIETRLR  
KG

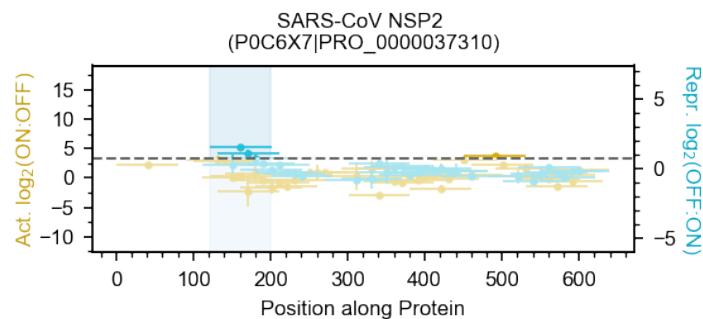
Max tile of repression domain from residues 121 to 200 (estimated 27.8% to 28.6% of cells repressed):

RSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTCDFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGP

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SARS-CoV NSP2 (P0C6X7|PRO\_0000037310)

Gene: NSP2 ; Protein Family: NSP2



Extended repression domain from residues 121 to 220:

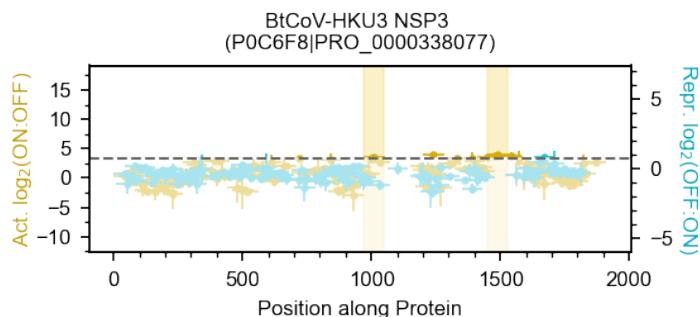
RSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTCDFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSNIETRLR  
KG

Max tile of repression domain from residues 121 to 200 (estimated 27.8% to 28.6% of cells repressed):

RSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTCDFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGP

BtCoV-HKU3 NSP3 (P0C6F8|PRO\_0000338077)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1441 to 1530:

CSVCLSGLDSLDSYPALETIQVTISSYKLDLTLGLAAEWLLAYMLFTKFFYLLGLSAIMQAFFGYFASHFISNSWLMWFIISIVQMAPV

Max tile of activation domain from residues 1451 to 1530 (estimated 17.7% to 25.2% of cells activated):

LDSYPALETIQVTISSYKLDLTLGLAAEWLLAYMLFTKFFYLLGLSAIMQAFFGYFASHFISNSWLMWFIISIVQMAPV

Extended activation domain from residues 961 to 1050:

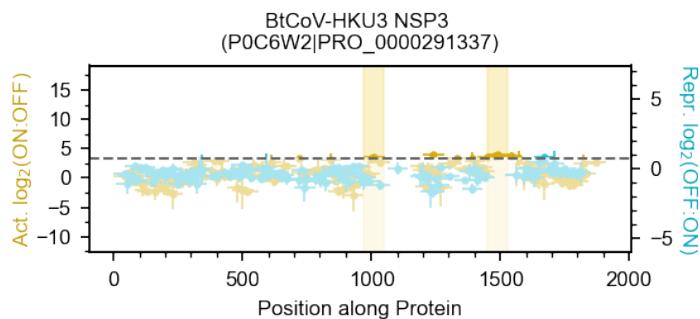
SAPPAEYKLQQGAFLCANETYTGNYQCGHYTHITAKETLYRVDGAHLTKMSEYKGPVTDVFYKETSYTTAIKPVSYKLDGVTYTEIEPKLD

Max tile of activation domain from residues 971 to 1050 (estimated 15.4% to 18.5% of cells activated):

QGAFLCANETYTGNYQCGHYTHITAKETLYRVDGAHLTKMSEYKGPVTDVFYKETSYTTAIKPVSYKLDGVTYTEIEPKLD

BtCoV-HKU3 NSP3 (P0C6W2|PRO\_0000291337)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1441 to 1530:

CSVCLSGLDSLDSYPALETIQVTISSYKLDLTLGLAAEWLLAYMLFTKFFYLLGLSAIMQAFFGYFASHFISNSLMWFIIISIVQMAPV

Max tile of activation domain from residues 1451 to 1530 (estimated 17.7% to 25.2% of cells activated):

LDSYPALETIQVTISSYKLDLTLGLAAEWLLAYMLFTKFFYLLGLSAIMQAFFGYFASHFISNSLMWFIIISIVQMAPV

Extended activation domain from residues 961 to 1050:

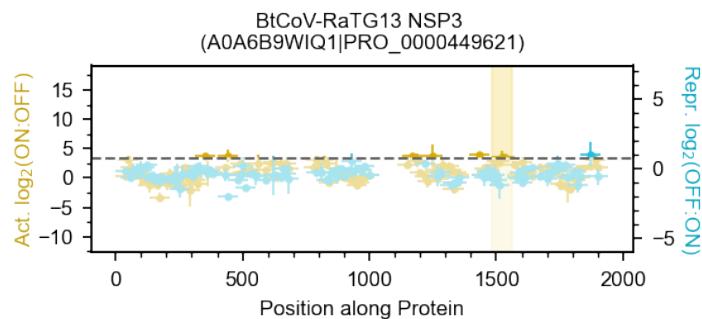
SAPPAEYKLQQGAFLCANETYTGNYQCGHYTHITAKETLYRVDGAHLTKMSEYKGPVTDVFYKETSYTTAIKPVSYKLDGVTYTEIEPKLD

Max tile of activation domain from residues 971 to 1050 (estimated 15.4% to 18.5% of cells activated):

QGAFLCANETYTGNYQCGHYTHITAKETLYRVDGAHLTKMSEYKGPVTDVFYKETSYTTAIKPVSYKLDGVTYTEIEPKLD

BtCoV-RaTG13 NSP3 (A0A6B9WIQ1|PRO\_0000449621)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1481 to 1570:

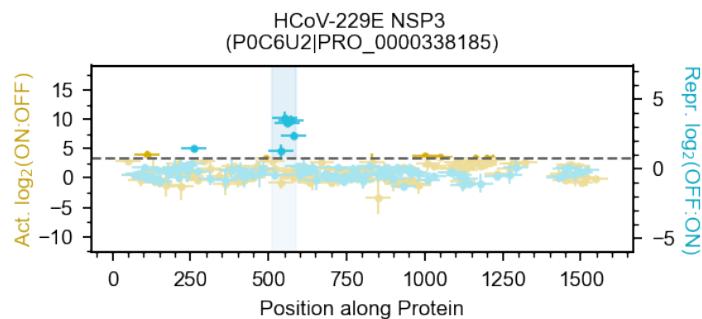
TPSLETIQITISSFKWDLTAFGLVAEWFLAYILFTRFFYVLGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFAS

Max tile of activation domain from residues 1481 to 1560 (estimated 8.3% to 30.0% of cells activated):

TPSLETIQITISSFKWDLTAFGLVAEWFLAYILFTRFFYVLGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISA

HCoV-229E NSP3 (P0C6U2|PRO\_0000338185)

Gene: NSP3 ; Protein Family: NSP3



Extended repression domain from residues 501 to 620:

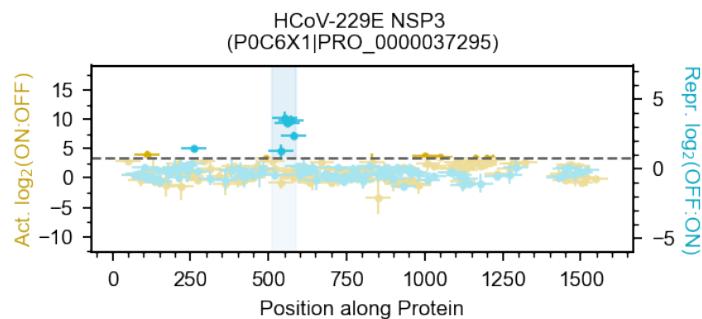
KLETSLLEVLLDVCNTKEVKVFVYTDTEVCKVKDFVSGLVNVQKVEQPKIEPKPVSVIKVAPKPYRVDGKFSYFTEDLLCVADDKPIVLFTDSMLTLDDRGL  
ALDNALSGVLSAAIKDCVD

Max tile of repression domain from residues 511 to 590 (estimated 72.3% to 93.4% of cells repressed):

DVCNTKEVKVFVYTDTEVCKVKDFVSGLVNVQKVEQPKIEPKPVSVIKVAPKPYRVDGKFSYFTEDLLCVADDKPIVLFT

HCoV-229E NSP3 (P0C6X1|PRO\_0000037295)

Gene: NSP3 ; Protein Family: NSP3



Extended repression domain from residues 501 to 620:

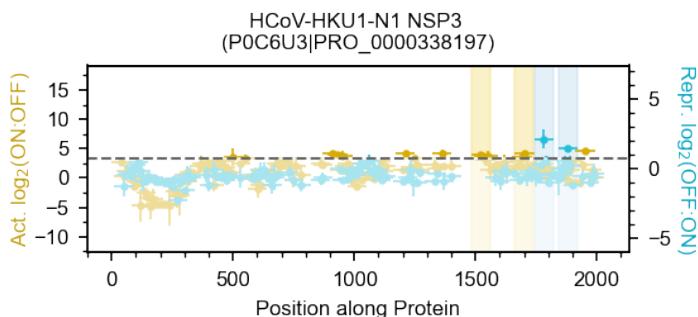
KLETSLLEVLLDVCNTKEVKVFVYTDTEVCKVKDFVSGLVNVQKVEQPKIEPKPVSVIKVAPKPYRVDGKFSYFTEDLLCVADDKPIVLFTDSMLTLDDRGL  
ALDNALSGVLSAAIKDCVD

Max tile of repression domain from residues 511 to 590 (estimated 72.3% to 93.4% of cells repressed):

DVCNTKEVKVFVYTDTEVCKVKDFVSGLVNVQKVEQPKIEPKPVSVIKVAPKPYRVDGKFSYFTEDLLCVADDKPIVLFT

## HCoV-HKU1-N1 NSP3 (P0C6U3|PRO\_0000338197)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1651 to 1740:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1661 to 1740 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended activation domain from residues 1481 to 1570:

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDMLDTYAAIDFV

Max tile of activation domain from residues 1481 to 1560 (estimated 21.5% to 21.5% of cells activated):

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDM

Extended repression domain from residues 1741 to 1830:

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFLNAVVFYAQSL

Max tile of repression domain from residues 1741 to 1820 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFL

Extended repression domain from residues 1831 to 1920:

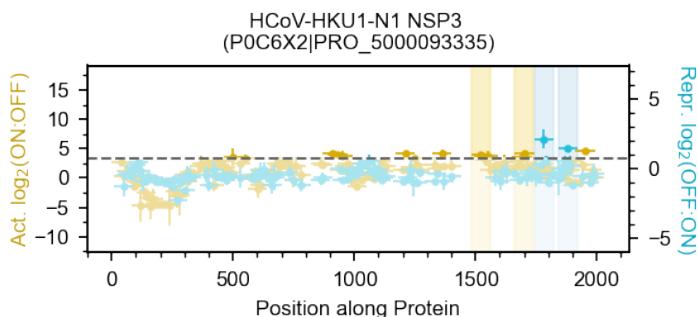
YRPILLVDKKLITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

Max tile of repression domain from residues 1841 to 1920 (estimated 26.2% to 27.1% of cells repressed):

LITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

## HCoV-HKU1-N1 NSP3 (P0C6X2|PRO\_5000093335)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1651 to 1740:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1661 to 1740 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended activation domain from residues 1481 to 1570:

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDMLDTYAAIDFV

Max tile of activation domain from residues 1481 to 1560 (estimated 21.5% to 21.5% of cells activated):

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDM

Extended repression domain from residues 1741 to 1830:

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRANFLNAVVFYAQSL

Max tile of repression domain from residues 1741 to 1820 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRANFL

Extended repression domain from residues 1831 to 1920:

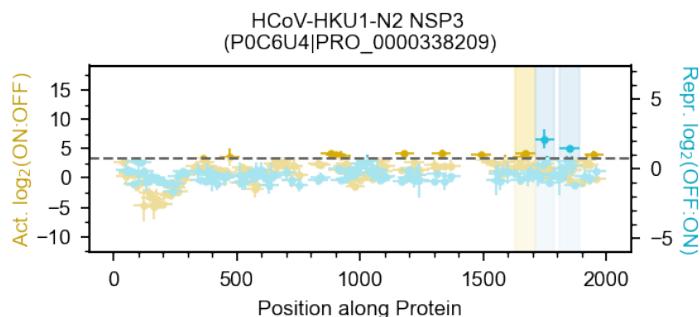
YRPILLVDKKLITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

Max tile of repression domain from residues 1841 to 1920 (estimated 26.2% to 27.1% of cells repressed):

LITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

HCoV-HKU1-N2 NSP3 (P0C6U4|PRO\_0000338209)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1621 to 1710:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1631 to 1710 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended repression domain from residues 1711 to 1800:

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVVKVPNLYVVVVESDADRNFLNAVVFYAQSL

Max tile of repression domain from residues 1711 to 1790 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVVKVPNLYVVVVESDADRNFL

Extended repression domain from residues 1801 to 1890:

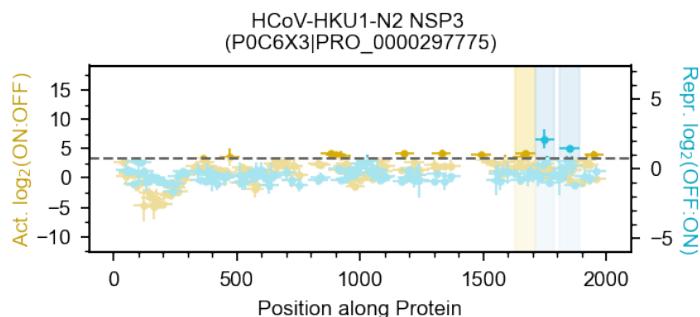
YRPILLVDKKLITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

Max tile of repression domain from residues 1811 to 1890 (estimated 26.2% to 27.1% of cells repressed):

LITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

HCoV-HKU1-N2 NSP3 (P0C6X3|PRO\_0000297775)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1621 to 1710:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1631 to 1710 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended repression domain from residues 1711 to 1800:

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFLNAVVFYAQSL

Max tile of repression domain from residues 1711 to 1790 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFL

Extended repression domain from residues 1801 to 1890:

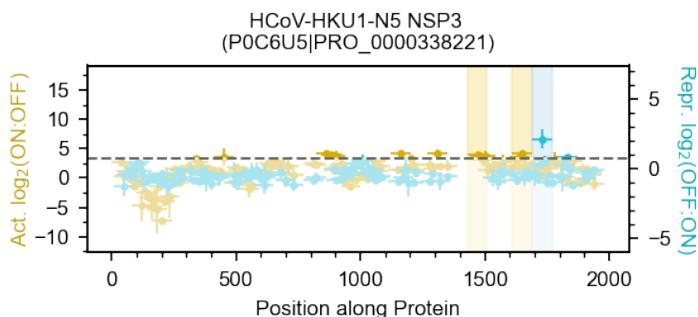
YRPILLVDKKLITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

Max tile of repression domain from residues 1811 to 1890 (estimated 26.2% to 27.1% of cells repressed):

LITTACNGISVTQTMFDVYVDTFMSHFDVDRKSFNNFVNIAHASLREGVQLEKVLDTFVGCVRKCCSIDSDVETRFITKS

## HCoV-HKU1-N5 NSP3 (P0C6U5|PRO\_0000338221)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1601 to 1690:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1611 to 1690 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended activation domain from residues 1431 to 1520:

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDMLDTYAAIDFV

Max tile of activation domain from residues 1431 to 1510 (estimated 21.5% to 21.5% of cells activated):

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDM

Extended repression domain from residues 1691 to 1780:

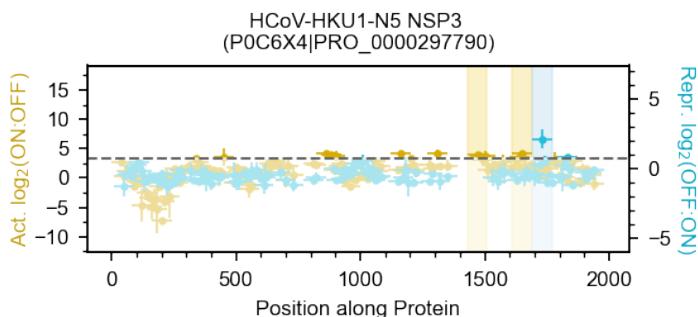
SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFLNAVVFYAQSL

Max tile of repression domain from residues 1691 to 1770 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFL

## HCoV-HKU1-N5 NSP3 (P0C6X4|PRO\_0000297790)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1601 to 1690:

YIVVTAMYKVVGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Max tile of activation domain from residues 1611 to 1690 (estimated 18.3% to 32.1% of cells activated):

VGFIRHIVYGCKAGCLFCYKRNCNSVRVKCSTIVGGVIRYYDITANGGTGFCVKHQWNCFNCHSFKPGNTFITVEAAIEL

Extended activation domain from residues 1431 to 1520:

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFDMLDTYAAIDFV

Max tile of activation domain from residues 1431 to 1510 (estimated 21.5% to 21.5% of cells activated):

VATVFLFWFNFLYINVIFSDFYLPNISVFPIFVGRIWMWIKATFGLVTICDFYSKLGVGFTSHFCNGSFICELCHSGFD

Extended repression domain from residues 1691 to 1780:

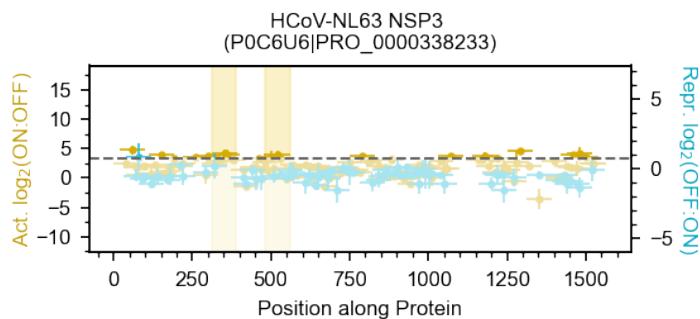
SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFLNAVVFYAQSL

Max tile of repression domain from residues 1691 to 1770 (estimated 26.0% to 63.7% of cells repressed):

SKELKRPVNPTDASHYVVTDIKQVGCMMLFYDRDGQRVYDDVDASLFVDINNLHSKVKKVVPNLVVVVESDADRNFL

HCoV-NL63 NSP3 (P0C6U6|PRO\_0000338233)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 311 to 400:

GSGHYQTNLYSFNKAIDGFGVFDIKNSSVNTVCFVDVDFHSVEIEAGEVKPFAVYKNVKFYLGDISHLVNCVSFDFVVNAANENLLHGGG

Max tile of activation domain from residues 311 to 390 (estimated 17.3% to 35.0% of cells activated):

GSGHYQTNLYSFNKAIDGFGVFDIKNSSVNTVCFVDVDFHSVEIEAGEVKPFAVYKNVKFYLGDISHLVNCVSFDFVVNA

Extended activation domain from residues 481 to 570:

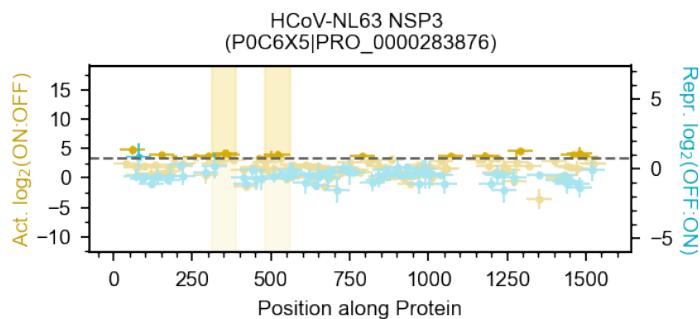
IFGVRIENSLKALFSCDINKPLQVFVYSSNEEQAVLKFLDGLDLTPVIDDVVKPFRVEGNFSFFDCGVNALDGDIYLLFTNSILMDK

Max tile of activation domain from residues 481 to 560 (estimated 13.5% to 31.3% of cells activated):

IFGVRIENSLKALFSCDINKPLQVFVYSSNEEQAVLKFLDGLDLTPVIDDVVKPFRVEGNFSFFDCGVNALDGDIYLL

HCoV-NL63 NSP3 (P0C6X5|PRO\_0000283876)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 311 to 400:

GSGHYQTNLYSFNKAIDGFGVFDIKNSSVNTVCFVDVDFHSVEIEAGEVKPFAVYKNVKFYLGDISHLVNCVSFDFVVNAANENLLHGGG

Max tile of activation domain from residues 311 to 390 (estimated 17.3% to 35.0% of cells activated):

GSGHYQTNLYSFNKAIDGFGVFDIKNSSVNTVCFVDVDFHSVEIEAGEVKPFAVYKNVKFYLGDISHLVNCVSFDFVVNA

Extended activation domain from residues 481 to 570:

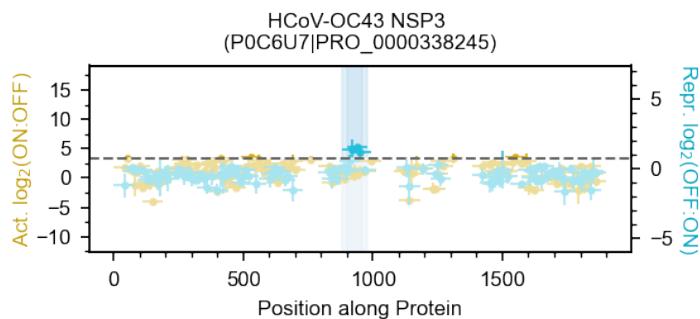
IFGVRIENSLKALFSCDINKPLQVFVYSSNEEQAVLKFLDGLDLTPVIDDVVKPFRVEGNFSFFDCGVNALDGDIYLLFTNSILMDK

Max tile of activation domain from residues 481 to 560 (estimated 13.5% to 31.3% of cells activated):

IFGVRIENSLKALFSCDINKPLQVFVYSSNEEQAVLKFLDGLDLTPVIDDVVKPFRVEGNFSFFDCGVNALDGDIYLL

## HCoV-OC43 NSP3 (P0C6U7|PRO\_0000338245)

Gene: NSP3 ; Protein Family: NSP3



Extended repression domain from residues 901 to 990:

GVKQEQRGRTGLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKLPKGVGGSANIFIGDNVGHYVHVVKCEQSYQLY

Max tile of repression domain from residues 901 to 980 (estimated 24.0% to 32.4% of cells repressed):

GVKQEQRGRTGLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKLPKGVGGSANIFIGDNVGHYVH

Extended repression domain from residues 871 to 960:

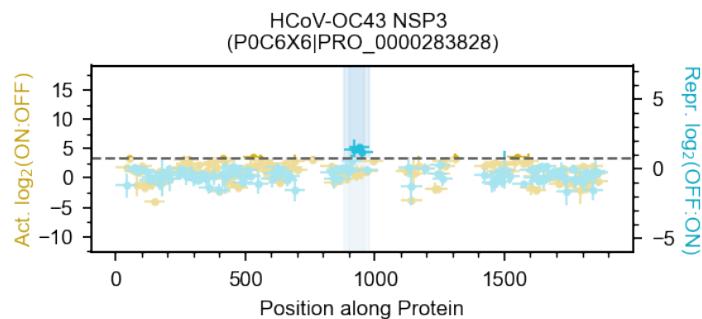
PADSRDFLRRVVFSQLTGAICDFEACKCGVKQEQRGRTGLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKL

Max tile of repression domain from residues 881 to 960 (estimated 18.1% to 40.2% of cells repressed):

VFSQVDLTGAICDFEACKCGVKQEQRGRTGLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKL

## HCoV-OC43 NSP3 (P0C6X6|PRO\_0000283828)

Gene: NSP3 ; Protein Family: NSP3



Extended repression domain from residues 901 to 990:

GVKQEQRGTLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKLPKGVGGSANIFIGDNVGHYVHVVKCEQSYQLY

Max tile of repression domain from residues 901 to 980 (estimated 24.0% to 32.4% of cells repressed):

GVKQEQRGTLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKLPKGVGGSANIFIGDNVGHYVH

Extended repression domain from residues 871 to 960:

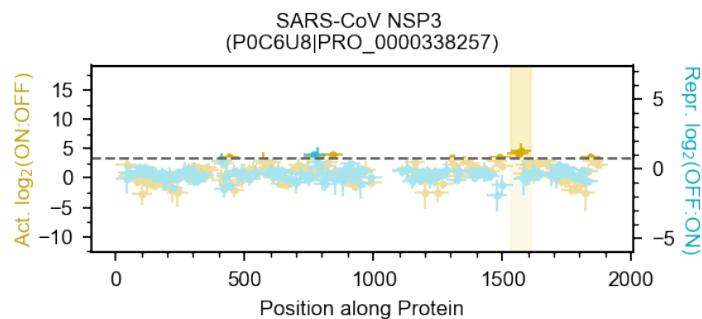
PADSRDFLRRVVFSQLTGAICDFEACKCGVKQEQRGTLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKL

Max tile of repression domain from residues 881 to 960 (estimated 18.1% to 40.2% of cells repressed):

VFSQVDLTGAICDFEACKCGVKQEQRGTLDAVMHFGTLSREDLEIGYTVDCSCGKKLIHCVRFDVPFLICSNTPASVKL

SARS-CoV NSP3 (P0C6U8|PRO\_0000338257)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1521 to 1610:

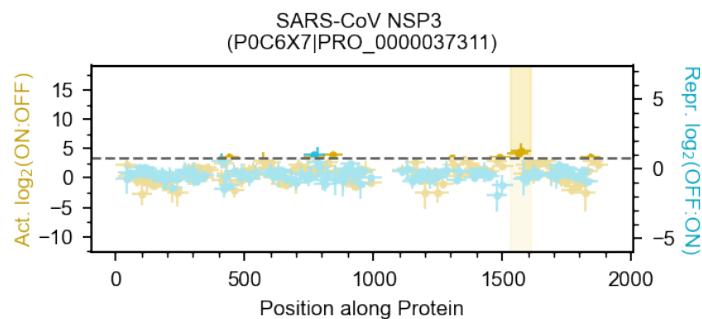
SWLMWFIISIVQMAPVSAMVRMYIFFASFYYIWKSYVHIMDGCTSSTCMMCYKRNRASTRVECTTIVNGMKRSFYVYANGGRGFCKTHNWN

Max tile of activation domain from residues 1531 to 1610 (estimated 12.6% to 56.1% of cells activated):

VQMAPVSAMVRMYIFFASFYYIWKSYVHIMDGCTSSTCMMCYKRNRASTRVECTTIVNGMKRSFYVYANGGRGFCKTHNWN

SARS-CoV NSP3 (P0C6X7|PRO\_0000037311)

Gene: NSP3 ; Protein Family: NSP3



Extended activation domain from residues 1521 to 1610:

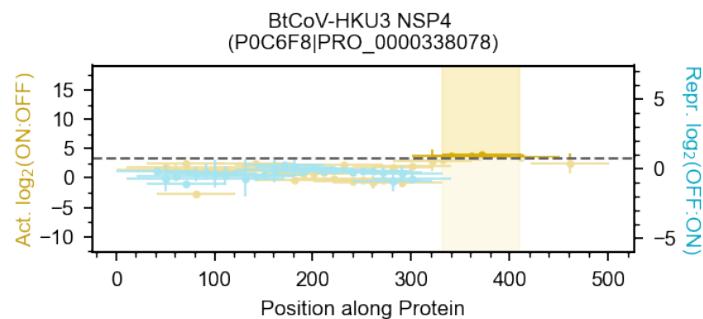
SWLMWFIISIVQMAPVSAMVRMYIFFASFYYIWKSYVHIMDGCTSSTCMMCYKRNRASTRVECTTIVNGMKRSFYVYANGGRGFCKTHNWN

Max tile of activation domain from residues 1531 to 1610 (estimated 12.6% to 56.1% of cells activated):

VQMAPVSAMVRMYIFFASFYYIWKSYVHIMDGCTSSTCMMCYKRNRASTRVECTTIVNGMKRSFYVYANGGRGFCKTHNWN

BtCoV-HKU3 NSP4 (P0C6F8|PRO\_0000338078)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 321 to 410:

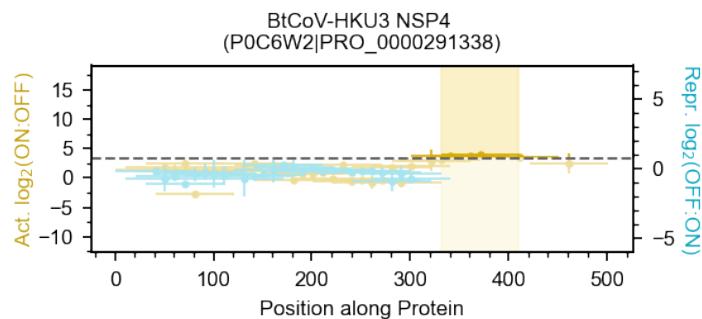
LFLMSFTILCLAPAYSFLPGVYSIFYLYLTFTYFTNDVSFLAHLQWFAMFSPIVFWITAIYVFCISLKHFWFFSNYLKKRVMFNGVTFS

Max tile of activation domain from residues 331 to 410 (estimated 18.6% to 24.8% of cells activated):

LAPAYSFLPGVYSIFYLYLTFTYFTNDVSFLAHLQWFAMFSPIVFWITAIYVFCISLKHFWFFSNYLKKRVMFNGVTFS

BtCoV-HKU3 NSP4 (P0C6W2|PRO\_0000291338)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 321 to 410:

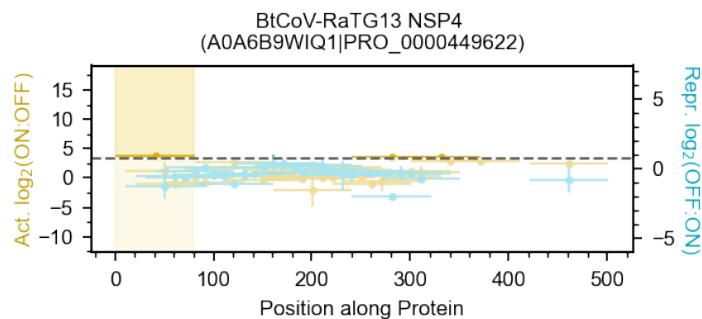
LFLMSFTILCLAPAYSFLPGVYSIFYLYLTFTYFTNDVSFLAHLQWFAMFSPIVPFWITAIYVFCISLKHFWFFSNYLKKRVMFNGVTFS

Max tile of activation domain from residues 331 to 410 (estimated 18.6% to 24.8% of cells activated):

LAPAYSFLPGVYSIFYLYLTFTYFTNDVSFLAHLQWFAMFSPIVPFWITAIYVFCISLKHFWFFSNYLKKRVMFNGVTFS

BtCoV-RaTG13 NSP4 (A0A6B9WIQ1|PRO\_0000449622)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 1 to 80:

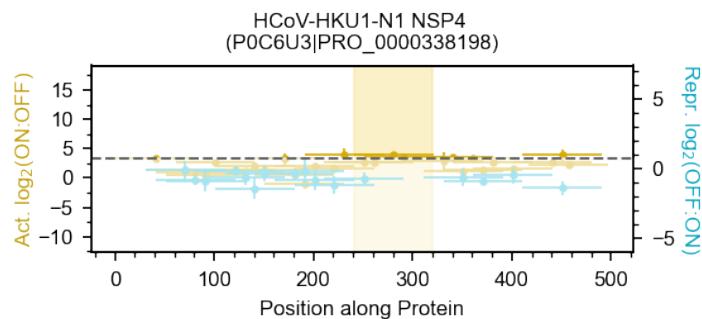
KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

Max tile of activation domain from residues 1 to 80 (estimated 14.0% to 22.9% of cells activated):

KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

HCoV-HKU1-N1 NSP4 (P0C6U3|PRO\_0000338198)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 241 to 330:

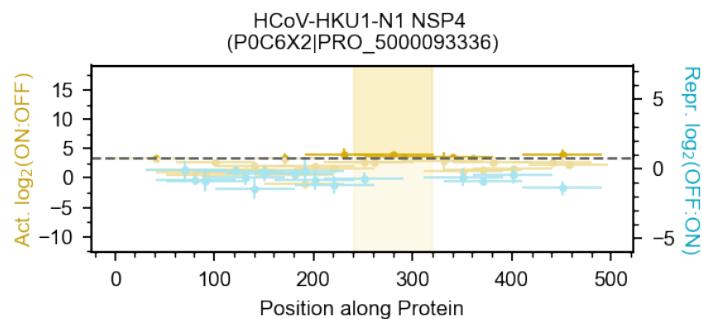
VLNNDYYRSMPGTFCGRDLFDFYQFFSSLIRPIDFFSLTASSIFGAILAIVVVLVFYYLIKLIKRAFGDYSVSVINVVVWCINFLMLFV

Max tile of activation domain from residues 241 to 320 (estimated 17.7% to 25.6% of cells activated):

VLNNDYYRSMPGTFCGRDLFDFYQFFSSLIRPIDFFSLTASSIFGAILAIVVVLVFYYLIKLIKRAFGDYSVSVINVVV

HCoV-HKU1-N1 NSP4 (P0C6X2|PRO\_5000093336)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 241 to 330:

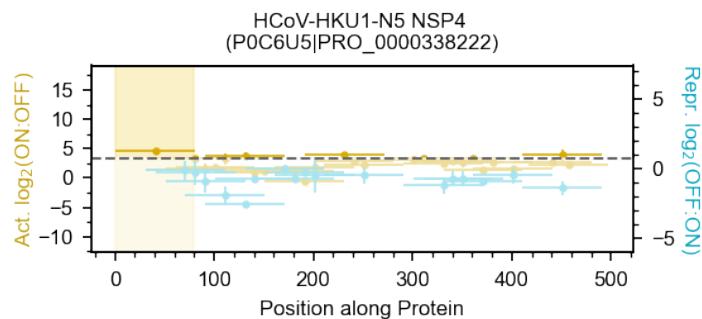
VLNNDYYRSMPGTFCGRDLFDLFYQFFSSLIRPIDFFSLTASSIFGAILAIVVVLVFYYLIKLIKRAFGDYSVSVINVVVWCINFLMLFV

Max tile of activation domain from residues 241 to 320 (estimated 17.7% to 25.6% of cells activated):

VLNNDYYRSMPGTFCGRDLFDLFYQFFSSLIRPIDFFSLTASSIFGAILAIVVVLVFYYLIKLIKRAFGDYSVSVINVVV

HCoV-HKU1-N5 NSP4 (P0C6U5|PRO\_0000338222)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 1 to 80:

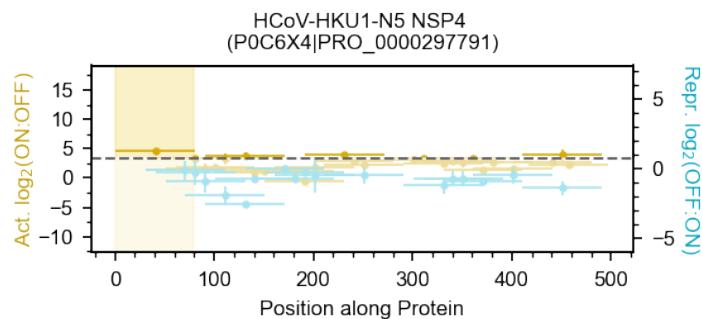
VVLSNLLYILFFISLICFILLWALLPTYSVYKSDIHLPAYASFVIDNGVVRDISVNDLCFANKFFQFDQWYESTFGSVY

Max tile of activation domain from residues 1 to 80 (estimated 31.3% to 34.3% of cells activated):

VVLSNLLYILFFISLICFILLWALLPTYSVYKSDIHLPAYASFVIDNGVVRDISVNDLCFANKFFQFDQWYESTFGSVY

HCoV-HKU1-N5 NSP4 (P0C6X4|PRO\_0000297791)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 1 to 80:

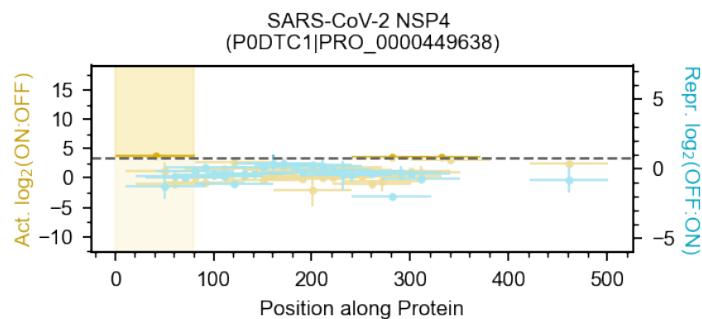
VVLSNLLYILFFISLICFILLWALLPTYSVYKSDIHLPAYASFKVIDNGVVRDISVNDLCFANKFFQFDQWYESTFGSVY

Max tile of activation domain from residues 1 to 80 (estimated 31.3% to 34.3% of cells activated):

VVLSNLLYILFFISLICFILLWALLPTYSVYKSDIHLPAYASFKVIDNGVVRDISVNDLCFANKFFQFDQWYESTFGSVY

SARS-CoV-2 NSP4 (P0DTC1|PRO\_0000449638)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 1 to 80:

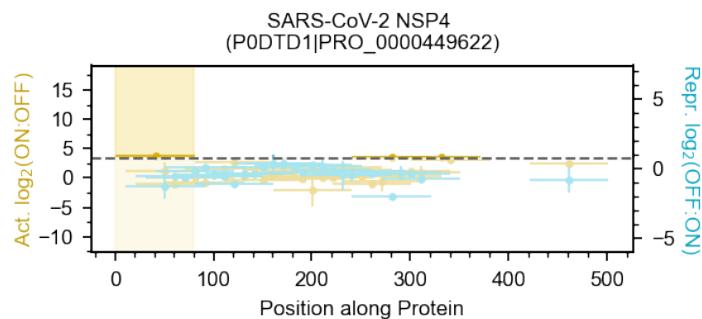
KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

Max tile of activation domain from residues 1 to 80 (estimated 14.0% to 22.9% of cells activated):

KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

SARS-CoV-2 NSP4 (P0DTD1|PRO\_0000449622)

Gene: NSP4 ; Protein Family: NSP4



Extended activation domain from residues 1 to 80:

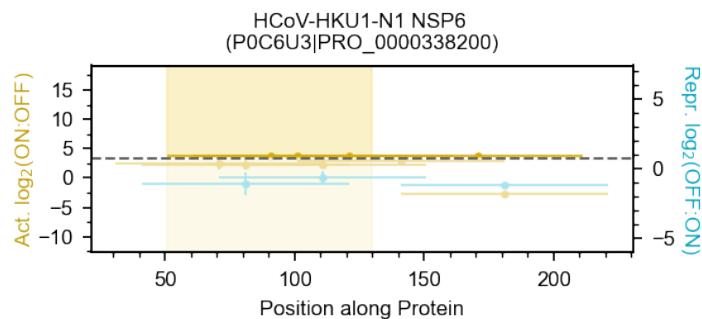
KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

Max tile of activation domain from residues 1 to 80 (estimated 14.0% to 22.9% of cells activated):

KIVNNWLKQLIKVTLVFLVAAIFYLITPVHVMSKHTDFSSEIIGYKAIDGGVTRDIASTDTCFANKHADFDTWFSQRGG

HCoV-HKU1-N1 NSP6 (P0C6U3|PRO\_0000338200)

Gene: NSP6 ; Protein Family: NSP6



Extended activation domain from residues 51 to 140:

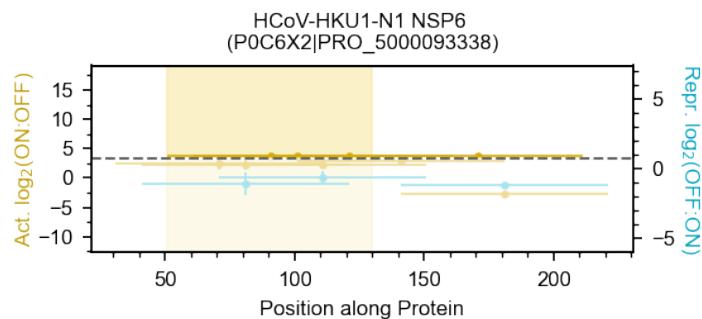
FVSFMMLLVKHKHFYLTMYIIPVLCTLFYVNLYLVVYKEGFRGFTYVWLSYFVPAVNFTYVYEVFYGCILCVFAIFITMHSINHDIFSLMF

Max tile of activation domain from residues 51 to 130 (estimated 18.4% to 22.4% of cells activated):

FVSFMMLLVKHKHFYLTMYIIPVLCTLFYVNLYLVVYKEGFRGFTYVWLSYFVPAVNFTYVYEVFYGCILCVFAIFITMHS

HCoV-HKU1-N1 NSP6 (P0C6X2|PRO\_5000093338)

Gene: NSP6 ; Protein Family: NSP6



Extended activation domain from residues 51 to 140:

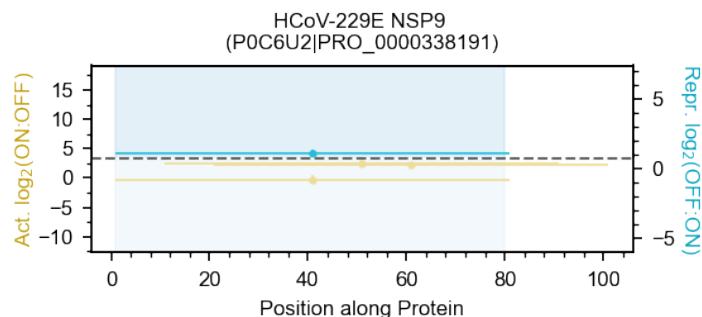
FVSFMMLLVKHKHFYLTMYIIPVLCTLFYVNLYLVVYKEGFRGFTYVWLSYFVPAVNFTYVYEVFYGCILCVFAIFITMHSINHDIFSLMF

Max tile of activation domain from residues 51 to 130 (estimated 18.4% to 22.4% of cells activated):

FVSFMMLLVKHKHFYLTMYIIPVLCTLFYVNLYLVVYKEGFRGFTYVWLSYFVPAVNFTYVYEVFYGCILCVFAIFITMHS

HCoV-229E NSP9 (P0C6U2|PRO\_0000338191)

Gene: NSP9 ; Protein Family: NSP9



Extended repression domain from residues 1 to 80:

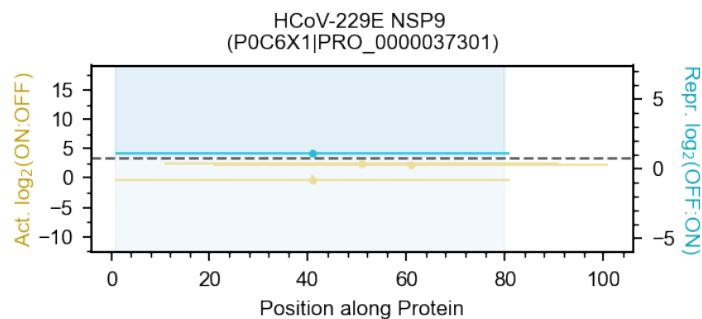
NNEIMPGKMKVKATKGEGDGGITSEGNALYNNEGGRAFMYAYVTTKPGMKYVKWEHDSGVVTVELEPPCRFVIDTPTGPQ

Max tile of repression domain from residues 1 to 80 (estimated 19.6% to 24.7% of cells repressed):

NNEIMPGKMKVKATKGEGDGGITSEGNALYNNEGGRAFMYAYVTTKPGMKYVKWEHDSGVVTVELEPPCRFVIDTPTGPQ

HCoV-229E NSP9 (P0C6X1|PRO\_0000037301)

Gene: NSP9 ; Protein Family: NSP9



Extended repression domain from residues 1 to 80:

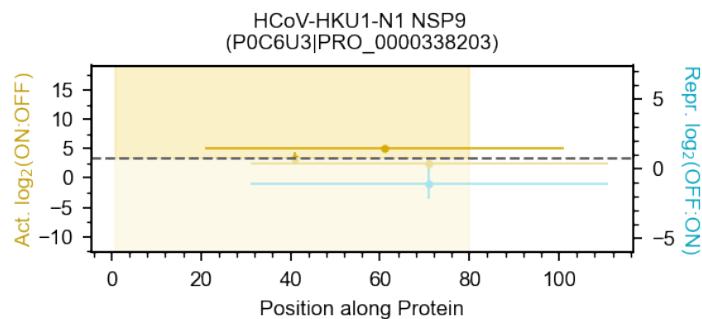
NNEIMPGKMKVKATKGEGDGGITSEGNALYNNEGGRAFMYAYVTTKPGMKYVKWEHDSGVVTVELEPPCRFVIDPTGPQ

Max tile of repression domain from residues 1 to 80 (estimated 19.6% to 24.7% of cells repressed):

NNEIMPGKMKVKATKGEGDGGITSEGNALYNNEGGRAFMYAYVTTKPGMKYVKWEHDSGVVTVELEPPCRFVIDPTGPQ

HCoV-HKU1-N1 NSP9 (P0C6U3|PRO\_0000338203)

Gene: NSP9 ; Protein Family: NSP9



Extended activation domain from residues 1 to 80:

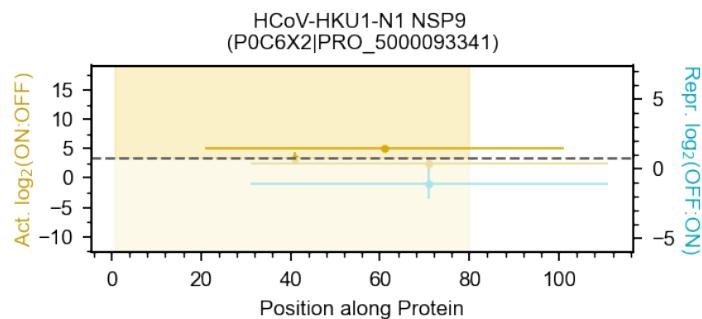
NNELMPHKLKIQVVNSGSDMNCNIPTQCYYNNGSSGRIVYAVLSDVDGLKYTKIMKDDGNCVVLELDPPCKFSIQDVKG

Max tile of activation domain from residues 1 to 80 (estimated 7.3% to 29.1% of cells activated):

NNELMPHKLKIQVVNSGSDMNCNIPTQCYYNNGSSGRIVYAVLSDVDGLKYTKIMKDDGNCVVLELDPPCKFSIQDVKG

HCoV-HKU1-N1 NSP9 (P0C6X2|PRO\_5000093341)

Gene: NSP9 ; Protein Family: NSP9



Extended activation domain from residues 1 to 80:

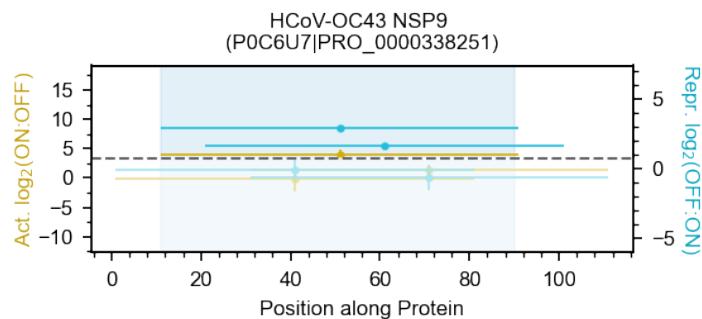
NNELMPHKLKIQVVNSGSDMNCNIPTQCYYNNNGSSGRIVYAVLSDVDGLKYTKIMKDDGNCVVLELDPPCKFSIQDVKG

Max tile of activation domain from residues 1 to 80 (estimated 7.3% to 29.1% of cells activated):

NNELMPHKLKIQVVNSGSDMNCNIPTQCYYNNNGSSGRIVYAVLSDVDGLKYTKIMKDDGNCVVLELDPPCKFSIQDVKG

HCoV-OC43 NSP9 (P0C6U7|PRO\_0000338251)

Gene: NSP9 ; Protein Family: NSP9



Extended repression domain from residues 11 to 100:

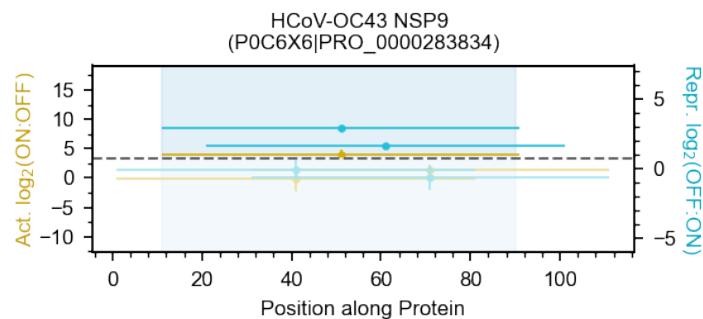
IQVVNSGPDPQTNCNPTQCYYNNNSNNGKIVYAILSDVDGLKYTKILKDDGNFVLELDPPCKFTVQDAKGLKIKYLYFVKGCNTLARGWVV

Max tile of repression domain from residues 11 to 90 (estimated 62.3% to 70.7% of cells repressed):

IQVVNSGPDPQTNCNPTQCYYNNNSNNGKIVYAILSDVDGLKYTKILKDDGNFVLELDPPCKFTVQDAKGLKIKYLYFVKG

HCoV-OC43 NSP9 (P0C6X6|PRO\_0000283834)

Gene: NSP9 ; Protein Family: NSP9



Extended repression domain from residues 11 to 100:

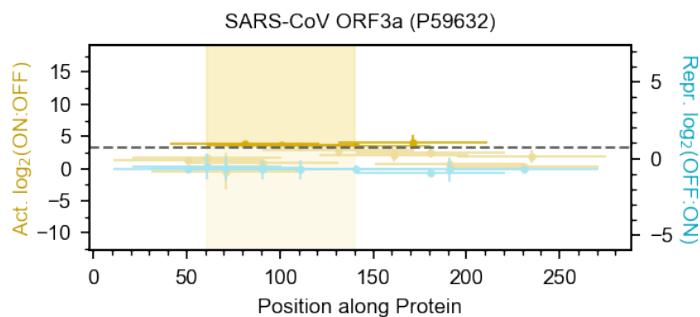
IQVVNSGPDPQTNCNPTQCYYNNNSNNGKIVYAILSDVDGLKYTKILKDDGNFVLELDPPCKFTVQDAKGLKIKYLYFVKGCNTLARGWVV

Max tile of repression domain from residues 11 to 90 (estimated 62.3% to 70.7% of cells repressed):

IQVVNSGPDPQTNCNPTQCYYNNNSNNGKIVYAILSDVDGLKYTKILKDDGNFVLELDPPCKFTVQDAKGLKIKYLYFVKG

SARS-CoV ORF3a (P59632)

Gene: ORF3a ; Protein Family: ORF3a



Extended activation domain from residues 61 to 150:

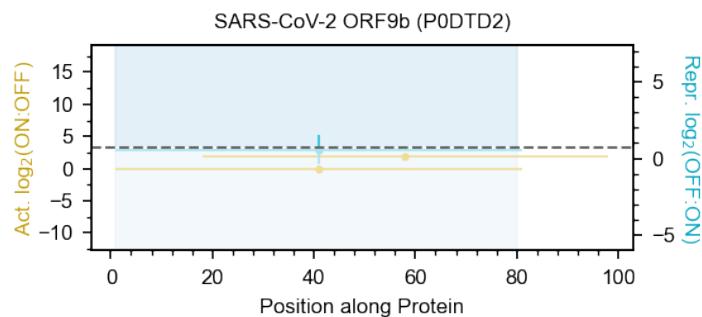
KIALNKRWQLALYKGFQFICNLLLLFVTIYSHLLLVAAGMEAQFLYLYALIYFLQCINACRIIMRCWLCKSKNPLLYDANYFVCWH

Max tile of activation domain from residues 61 to 140 (estimated 11.9% to 23.4% of cells activated):

KIALNKRWQLALYKGFQFICNLLLLFVTIYSHLLLVAAGMEAQFLYLYALIYFLQCINACRIIMRCWLCKSKNPLL

SARS-CoV-2 ORF9b (P0DTD2)

Gene: ORF9b ; Protein Family: ORF9b



Extended repression domain from residues 1 to 80:

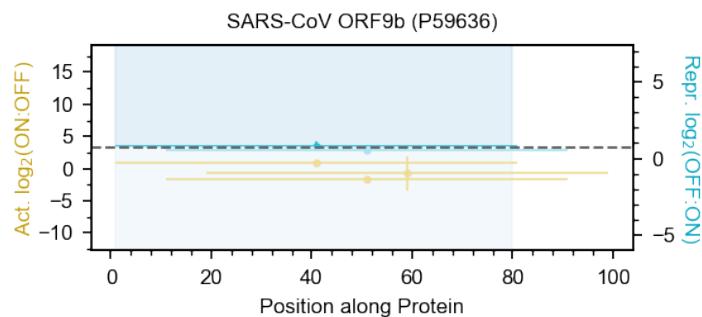
MDPKISEMHPALRLVDPQIQLAVTRMENAVGRDQNNVGPKVYPIILRLGSPLSLNMARKTLNSLEDKAFQLTPIAVQMKT

Max tile of repression domain from residues 1 to 80 (estimated 14.5% to 27.1% of cells repressed):

MDPKISEMHPALRLVDPQIQLAVTRMENAVGRDQNNVGPKVYPIILRLGSPLSLNMARKTLNSLEDKAFQLTPIAVQMKT

SARS-CoV ORF9b (P59636)

Gene: ORF9b ; Protein Family: ORF9b



Extended repression domain from residues 1 to 90:

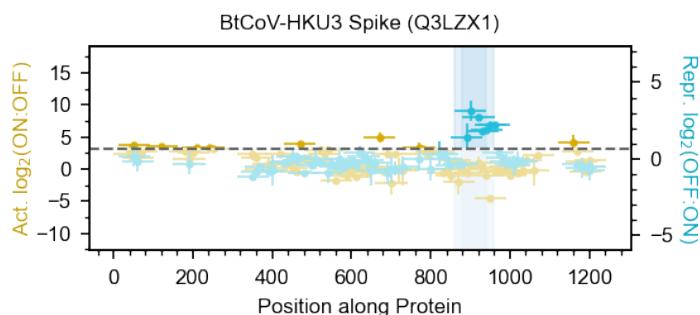
MDPNQTNVVPPALHLVDPQIQLTITRMEAMGQQQNSADPKVYPIILRLGSQSLSMARRNLDLEARAFQSTPIVVQMTKLATTEELPD

Max tile of repression domain from residues 1 to 80 (estimated 17.3% to 21.5% of cells repressed):

MDPNQTNVVPPALHLVDPQIQLTITRMEAMGQQQNSADPKVYPIILRLGSQSLSMARRNLDLEARAFQSTPIVVQMT

BtCoV-HKU3 Spike (Q3LZX1)

Gene: Spike ; Protein Family: Spike



Extended repression domain from residues 851 to 940:

ATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQESLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFG

Max tile of repression domain from residues 861 to 940 (estimated 53.9% to 88.6% of cells repressed):

AALQIPFAMQMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQESLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFG

Extended repression domain from residues 881 to 1000:

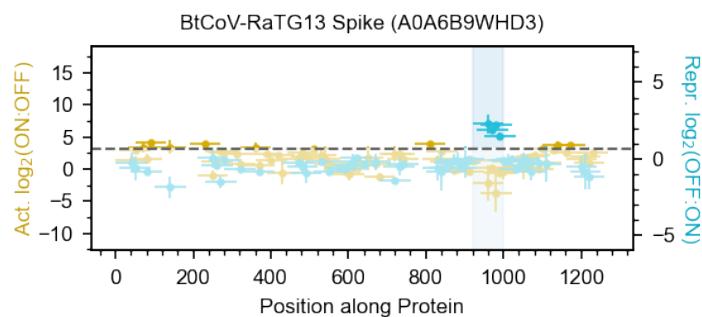
TQNVLYENQKLIANQFNSAIGKIQESLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQLTYVTQQLIR  
AAEIRASANLAATKMSE

Max tile of repression domain from residues 881 to 960 (estimated 59.8% to 62.9% of cells repressed):

TQNVLYENQKLIANQFNSAIGKIQESLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRDKVEAEV

BtCoV-RaTG13 Spike (A0A6B9WHD3)

Gene: Spike ; Protein Family: Spike



Extended repression domain from residues 921 to 1030:

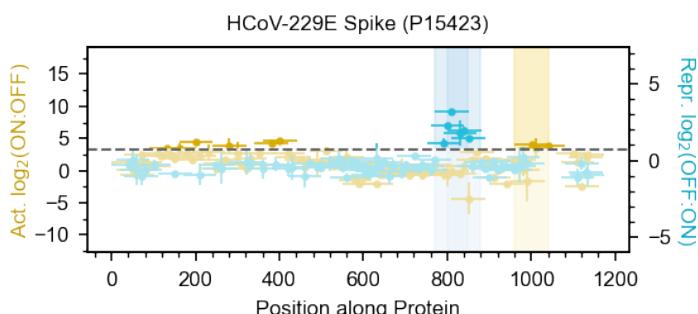
NQFNSAIGKIQDSLSSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAAT  
KMSECVL

Max tile of repression domain from residues 921 to 1000 (estimated 30.2% to 68.0% of cells repressed):

NQFNSAIGKIQDSLSSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAEVQIDRLITGRLQSL

HCoV-229E Spike (P15423)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 961 to 1050:

EAWSGLCVDTNGYVLRQPNLALYKEGNYYRITSRIMFEPRIPTMADFVQIENCNVTFVNISRSELQTIVPEYIDVNKTLQELSYKLPNY

Max tile of activation domain from residues 961 to 1040 (estimated 23.1% to 24.6% of cells activated):

EAWSGLCVDTNGYVLRQPNLALYKEGNYYRITSRIMFEPRIPTMADFVQIENCNVTFVNISRSELQTIVPEYIDVNKTL

Extended repression domain from residues 751 to 850:

SLIGGIALGGLTSAVSIPFSLAIQARLNVALQTDVLQENQKILAASFNKAMTNIVDAFTGVNDAITQTSQALQTVATALNKIQDVVNQQGNSLNHLTSQ

Max tile of repression domain from residues 771 to 850 (estimated 75.5% to 75.6% of cells repressed):

LAIQARLNVALQTDVLQENQKILAASFNKAMTNIVDAFTGVNDAITQTSQALQTVATALNKIQDVVNQQGNSLNHLTSQ

Extended repression domain from residues 791 to 890:

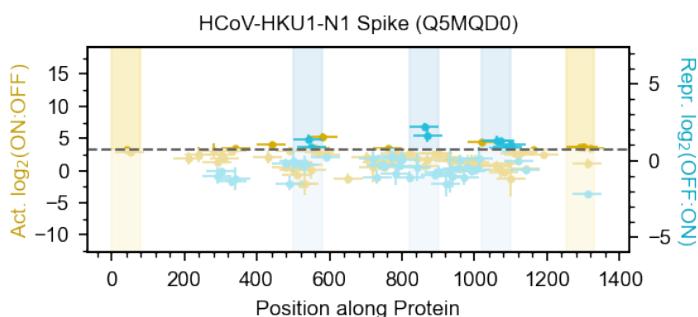
QKILAASFNKAMTNIVDAFTGVNDAITQTSQALQTVATALNKIQDVVNQQGNSLNHLTSQLRQNFAISSSIQAIYDRLDTIQADQQVDRLITGRLAALN

Max tile of repression domain from residues 801 to 880 (estimated 29.7% to 44.4% of cells repressed):

AMTNIVDAFTGVNDAITQTSQALQTVATALNKIQDVVNQQGNSLNHLTSQLRQNFAISSSIQAIYDRLDTIQADQQVDR

## HCoV-HKU1-N1 Spike (Q5MQD0)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 1251 to 1340:

NLTLNLHTINATFLDLYYEMNLIQESIKSLNNSYINLDIGTYEMYVKWPWYVWLISFSIIFLVLFFFICCTGCGSACFSKCHNCCD

Max tile of activation domain from residues 1251 to 1330 (estimated 17.2% to 19.5% of cells activated):

NLTLNLHTINATFLDLYYEMNLIQESIKSLNNSYINLDIGTYEMYVKWPWYVWLISFSIIFLVLFFFICCTGCGSA

Extended activation domain from residues 1 to 80:

MLLIIFILPTTAVIGDFNCTNFAINDLNTTVPRISEYVVVDVSYGLGTYYILDRLVYLNTTILFTGYFPKSGANFRDLSLK

Max tile of activation domain from residues 1 to 80 (estimated 13.4% to 14.3% of cells activated):

MLLIIFILPTTAVIGDFNCTNFAINDLNTTVPRISEYVVVDVSYGLGTYYILDRLVYLNTTILFTGYFPKSGANFRDLSLK

Extended repression domain from residues 821 to 910:

FVCNSYAACHDLLSEYGTFCDNINSILDEVNGLLDTTQLHVADTLMQGVTLSSNLNTNLHFDVDNINFKSLVGCLGPHCGSSRSFFEDL

Max tile of repression domain from residues 821 to 900 (estimated 39.0% to 50.5% of cells repressed):

FVCNSYAACHDLLSEYGTFCDNINSILDEVNGLLDTTQLHVADTLMQGVTLSSNLNTNLHFDVDNINFKSLVGCLGPHCG

Extended repression domain from residues 501 to 590:

YRSCESTTVLDHTDWCRCSCLPDPITAYDPRSCSQKSLVGVEHCAGFGVDEEKCGVLDGSYNVSCLCSTDADFGLWSYDTCVSNNRCNI

Max tile of repression domain from residues 501 to 580 (estimated 21.6% to 30.5% of cells repressed):

YRSCESTTVLDHTDWCRCSCLPDPITAYDPRSCSQKSLVGVEHCAGFGVDEEKCGVLDGSYNVSCLCSTDADFGLWSYD

Extended repression domain from residues 1021 to 1140:

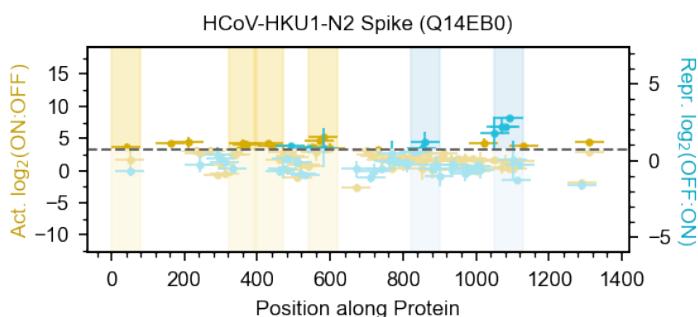
NGFSATNSALAKIQSVVNSNAQALNSLLQQLFNKGAISSSLQEILSRDALEAQVQIDRLINGRLTALNAYVSQQLSDISLVKFGAALAMEKVNECVKSQS  
PRINFCGNGNHILSLVQN

Max tile of repression domain from residues 1021 to 1100 (estimated 20.8% to 28.8% of cells repressed):

NGFSATNSALAKIQSVVNSNAQALNSLLQQLFNKGAISSSLQEILSRDALEAQVQIDRLINGRLTALNAYVSQQLSDI

## HCoV-HKU1-N2 Spike (Q14EB0)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 531 to 620:

NTCPKKVVVGIGEHCPLGLINEEKCGTQLNHSSCSCSPDAFLGWSFDSCISNNRCNIFNSNFNGINSGTTCSNDLLYSNTEVSTGVCV

Max tile of activation domain from residues 541 to 620 (estimated 33.4% to 51.0% of cells activated):

GIGEHCPLGLINEEKCGTQLNHSSCSCSPDAFLGWSFDSCISNNRCNIFNSNFNGINSGTTCSNDLLYSNTEVSTGVCV

Extended activation domain from residues 391 to 480:

FAIPNRRRDDLQLGSSGFLQSSNYKIDISSSSCQLYYSLPLVNVTINNFNPSSWNRRYGFGSNVSSYDVVYSDHCFSVNSDFCPCADPS

Max tile of activation domain from residues 391 to 470 (estimated 20.9% to 31.9% of cells activated):

FAIPNRRRDDLQLGSSGFLQSSNYKIDISSSSCQLYYSLPLVNVTINNFNPSSWNRRYGFGSNVSSYDVVYSDHCFSVN

Extended activation domain from residues 311 to 410:

VKPVATVYRIPNLPDCIDNWLNNSVPSPLNWERRIFSNCNFNLSTLLRLVHVDSFSCNNLDKSKIFGSCFNSITVDKFAIPNRRRDDLQLGSSGFLQ

Max tile of activation domain from residues 321 to 400 (estimated 15.5% to 35.9% of cells activated):

IPNLPDCIDNWLNNSVPSPLNWERRIFSNCNFNLSTLLRLVHVDSFSCNNLDKSKIFGSCFNSITVDKFAIPNRRRDD

Extended activation domain from residues 1 to 80:

MFLIIFILPTTLAVIGDFNCTNSFINDYNKTIPRISEDVVDVSLGLGTYYVLNRVYLNTTLLFTGYFPKSGANFRDLALK

Max tile of activation domain from residues 1 to 80 (estimated 12.7% to 26.9% of cells activated):

MFLIIFILPTTLAVIGDFNCTNSFINDYNKTIPRISEDVVDVSLGLGTYYVLNRVYLNTTLLFTGYFPKSGANFRDLALK

Extended repression domain from residues 1031 to 1130:

SVNANAQALNSLLQQQLFNKGAISSLQEILSRDNLEAQVQIDRLINGRLTALNAYVSQQLSDITLIKAGASRAIEKVNECVKSQSPRINF CGNGNHI

Max tile of repression domain from residues 1051 to 1130 (estimated 60.3% to 66.4% of cells repressed):

FGAISSLQEI LSRLDNLEAQVQIDRLINGRLTALNAYVSQQLSDITLIKAGASRAIEKVNECVKSQSPRINF CGNGNHI

Extended repression domain from residues 791 to 900:

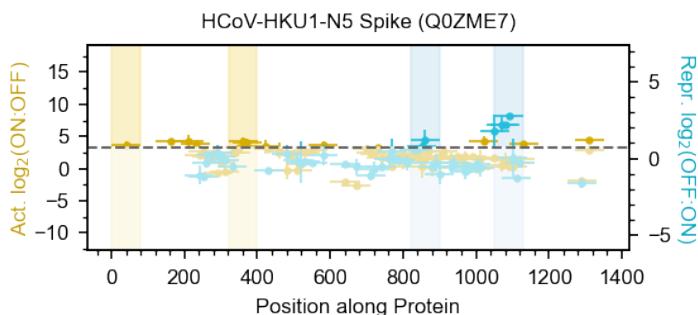
PTNFTIAGHEIFIQTSSPKVTIDCSAFVCSNYAAC HDLLSEYGTFCDNINSILNEVNDLLDITQLQVANALMQGVTLSSNLNTNLHSDVDNIDFKSLLGCLGSQCGSSR  
QCGSSS

Max tile of repression domain from residues 821 to 900 (estimated 16.8% to 34.8% of cells repressed):

NYAAC HDLLSEYGTFCDNINSILNEVNDLLDITQLQVANALMQGVTLSSNLNTNLHSDVDNIDFKSLLGCLGSQCGSSR

## HCoV-HKU1-N5 Spike (Q0ZME7)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 311 to 410:

VKPVATVYRRIPNLPDCDIDNWLNNSVPSPLNWERRIFSNCNFNLSTLLRLVHVDSFSCNNLDKSKIFGSCFNSITVDKFAIPNRRRDDLQLGSSGFLQ

Max tile of activation domain from residues 321 to 400 (estimated 15.5% to 35.9% of cells activated):

IPNLPDCDIDNWLNNSVPSPLNWERRIFSNCNFNLSTLLRLVHVDSFSCNNLDKSKIFGSCFNSITVDKFAIPNRRRDD

Extended activation domain from residues 1 to 80:

MFLIIFILPTTLAVIGDFNCTNSFINDYNKTIPRISEDVVVDVSLGLGTYYVLNRVYLNTTLLFTGYFPKSGANFRDLALK

Max tile of activation domain from residues 1 to 80 (estimated 12.7% to 26.9% of cells activated):

MFLIIFILPTTLAVIGDFNCTNSFINDYNKTIPRISEDVVVDVSLGLGTYYVLNRVYLNTTLLFTGYFPKSGANFRDLALK

Extended repression domain from residues 1031 to 1130:

SVVNANAQALNSLLQQQLFNKGAISSLQEILSRLDNLEAQVQIDRLINGRLTALNAYVSQQLSDITLIKAGASRAIEKVNECVKSQSPRINF CGNGNHI

Max tile of repression domain from residues 1051 to 1130 (estimated 60.3% to 66.4% of cells repressed):

FGAISSLQEILSRLDNLEAQVQIDRLINGRLTALNAYVSQQLSDITLIKAGASRAIEKVNECVKSQSPRINF CGNGNHI

Extended repression domain from residues 791 to 900:

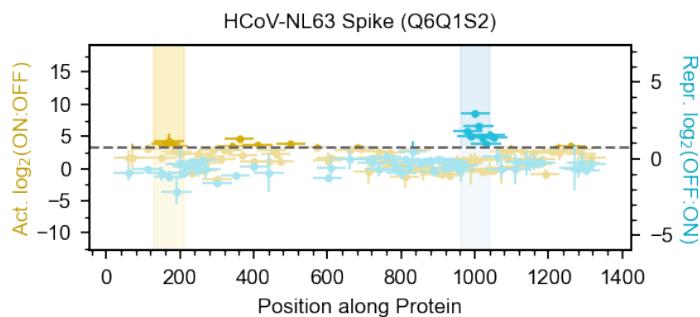
PTNFTIAGHEEFIQTSSPKVTIDCSAFVCSNYAACHDLLSEYGTFCDNINSILNEVNDLLDITQLQVANALMQGVTLSSNLNTNLHSDVDNIDFKSLLGCLGS QCGSSSR

Max tile of repression domain from residues 821 to 900 (estimated 16.8% to 34.8% of cells repressed):

NYAACHDLLSEYGTFCDNINSILNEVNDLLDITQLQVANALMQGVTLSSNLNTNLHSDVDNIDFKSLLGCLGSQCGSSSR

HCoV-NL63 Spike (Q6Q1S2)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 121 to 220:

SSSFDCIVNLLFTEQLGAPLGITISGETVRLHLYNVTRTFYVPAAYKLTKLSVKCYFNYSCVFSVVNATVTNVTTNGRVVNYVCDDCNGYTDNIFSV

Max tile of activation domain from residues 131 to 210 (estimated 12.1% to 44.1% of cells activated):

LFTEQLGAPLGITISGETVRLHLYNVTRTFYVPAAYKLTKLSVKCYFNYSCVFSVVNATVTNVTTNGRVVNYVCDDC

Extended repression domain from residues 941 to 1090:

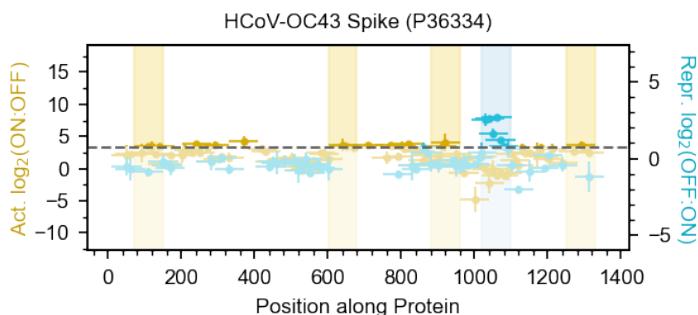
GLTSAAIPFSLALQARLNVALQTDVLQENQKILAASFNKAINNIVASFSSVNDAITQTAEAIHTVTIALNKIQDVVNQQGSALNHLTSQLRHNFQAISNSIQ  
AIYDRRLDSIQADQQVDRLLTGRALNAFVSQVLNKYTEVRGSRRL

Max tile of repression domain from residues 961 to 1040 (estimated 66.9% to 71.1% of cells repressed):

VALQTDVLQENQKILAASFNKAINNIVASFSSVNDAITQTAEAIHTVTIALNKIQDVVNQQGSALNHLTSQLRHNFQAIS

## HCoV-OC43 Spike (P36334)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 871 to 960:

TKLKDGVNFDNFSPVLGCLGSECSKASSRSAIEDLLFDKVKLSDVGVEAYNNCTGGAEIRDLCVQSYKGIVLPPLLSENQISG

Max tile of activation domain from residues 881 to 960 (estimated 9.1% to 47.4% of cells activated):

VDDINFSPVLGCLGSECSKASSRSAIEDLLFDKVKLSDVGVEAYNNCTGGAEIRDLCVQSYKGIVLPPLLSENQISG

Extended activation domain from residues 601 to 690:

SGLTCSTDLQKANTDIILGVCVNYDLYGILGQGIFVEVNATYYNSWQNLLYDSNGNLYGFRDYIINRTFMIRSCYSGRVSAAFHANSSEP

Max tile of activation domain from residues 601 to 680 (estimated 9.7% to 32.1% of cells activated):

SGLTCSTDLQKANTDIILGVCVNYDLYGILGQGIFVEVNATYYNSWQNLLYDSNGNLYGFRDYIINRTFMIRSCYSGRVS

Extended activation domain from residues 1251 to 1340:

LSLDYINVTFDLQVEMNRQLQEAIKVLNQSYINLKDIGTYEYYVKWPWYVLLICLAGVAMLVLLFICCCTGCGTSCFKC GCCDDYT

Max tile of activation domain from residues 1251 to 1330 (estimated 11.4% to 26.2% of cells activated):

LSLDYINVTFDLQVEMNRQLQEAIKVLNQSYINLKDIGTYEYYVKWPWYVLLICLAGVAMLVLLFICCCTGCGTSCFK

Extended activation domain from residues 71 to 160:

SGSTYRNMALKGSQLSRLWFKPPLSDFINGIFAKVKNTKVIKDRVMYSEFPAITIGSTFVNTSYSVVQPRTINSTQDGDNKLQGLLE

Max tile of activation domain from residues 71 to 150 (estimated 14.2% to 15.8% of cells activated):

SGSTYRNMALKGSQLSRLWFKPPLSDFINGIFAKVKNTKVIKDRVMYSEFPAITIGSTFVNTSYSVVQPRTINSTQD

Extended repression domain from residues 991 to 1130:

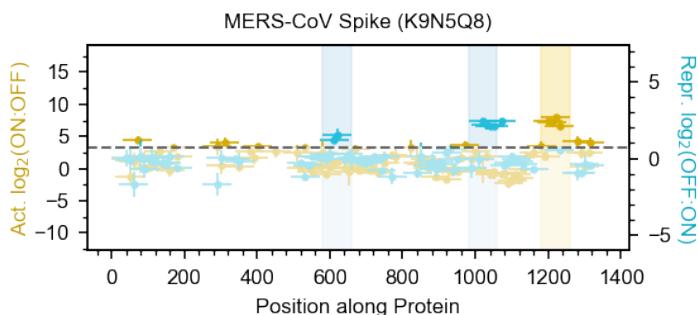
NGLGVMDVLSQNQKLIANAFNNALYAIQEGFDATNSALVKIQAVVNANAELNNLLQQLSNRFGAISASLQEILSRDALEAEAQIDRLINGRLTALNAYVSQQLSDSTLVKFSAAQAMEKVNECVKSQSSRINF CGNG

Max tile of repression domain from residues 1021 to 1100 (estimated 54.9% to 65.6% of cells repressed):

GFDATNSALVKIQAVVNANAELNNLLQQLSNRFGAISASLQEILSRDALEAEAQIDRLINGRLTALNAYVSQQLSDST

## MERS-CoV Spike (K9N5Q8)

Gene: Spike ; Protein Family: Spike



Extended activation domain from residues 1161 to 1270:

PTNCIAPVNGYFIKTNTRIVDEWSYTGSSFYAPEPITSLNTKYVAPQVTYQNISTNLPPPLGNSTGIDFQDELDEFFKNVSTSIPNFGSLTQINTTLLDTY  
EMLSLQ

Max tile of activation domain from residues 1181 to 1260 (estimated 81.3% to 85.0% of cells activated):

VDEWSYTGSSFYAPEPITSLNTKYVAPQVTYQNISTNLPPPLGNSTGIDFQDELDEFFKNVSTSIPNFGSLTQINTTLL

Extended repression domain from residues 981 to 1090:

NGVGITQQVLSENQKLIANKFNQALGAMQTGFTTTNEAFHKVQDAVNNNAQALSKLAELSNTFGAISASIGDIIQRDVLEQDAQIDRLINGRLTTLNAFV  
AQQLVRSE

Max tile of repression domain from residues 981 to 1060 (estimated 45.7% to 58.5% of cells repressed):

NGVGITQQVLSENQKLIANKFNQALGAMQTGFTTTNEAFHKVQDAVNNNAQALSKLAELSNTFGAISASIGDIIQRDV

Extended repression domain from residues 571 to 660:

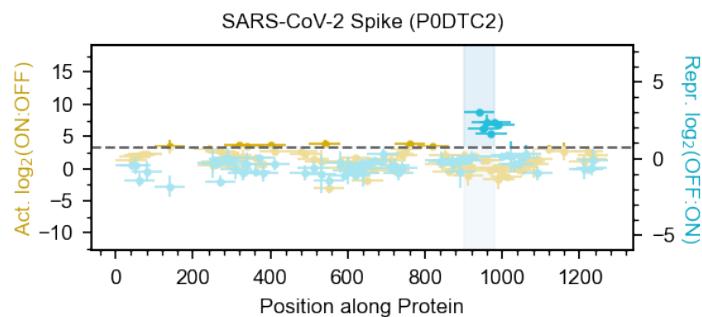
FGITVQYGTDTNSVCPKLEFANDTKIASQLGNCVEYSLYGVSGRGRVFQNCTAVGVRQQRFVYDAYQNLVGYYSDDGNYYCLRACVSVPVS

Max tile of repression domain from residues 581 to 660 (estimated 22.1% to 37.2% of cells repressed):

TNSVCPKLEFANDTKIASQLGNCVEYSLYGVSGRGRVFQNCTAVGVRQQRFVYDAYQNLVGYYSDDGNYYCLRACVSVPVS

SARS-CoV-2 Spike (P0DTC2)

Gene: Spike ; Protein Family: Spike



Extended repression domain from residues 901 to 1030:

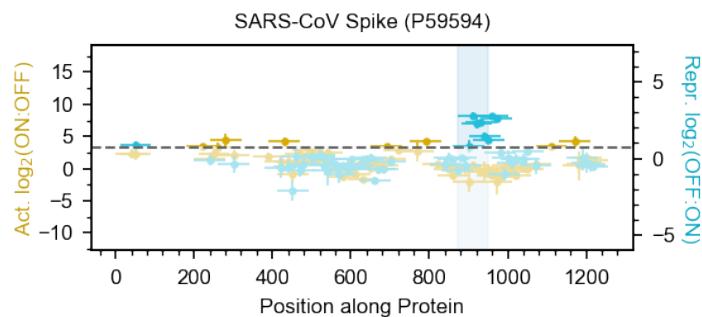
QMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQDSLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAEVQIDRLITGRLQ  
SLQTYVTQQQLIRAAEIRASANLAATKMS

Max tile of repression domain from residues 901 to 980 (estimated 67.7% to 72.2% of cells repressed):

QMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQDSLSSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDI

SARS-CoV Spike (P59594)

Gene: Spike ; Protein Family: Spike



Extended repression domain from residues 861 to 1010:

SGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAISQIQESLTTSTALGKLQDVNNQNAQALNTLVKQLSSNFGAISSVLN  
DILSRLDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATK

Max tile of repression domain from residues 871 to 950 (estimated 55.9% to 71.0% of cells repressed):

GAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAISQIQESLTTSTALGKLQDVNNQNAQALNTLVKQLSS