

Supplementary Table 1: Individual library peptides positive in CD8⁺ T cell epitope screen.

Protein	Amino Acids	Sequence (15-mer)	Protein	Amino Acids	Sequence (15-mer)
SH	41-55	LNKLCEYNVFNHNTF	M	26-40	DDDPASLTIWVPMFQ
	46-60	EYNVFNHNTFELPRA		66-80	KGPSLRVMINSRSAV
	50-64	FHNKTFELPRARVNT		101-115	KLAYDVTTTPEIKAC
P	11-25	EDANNRATKFLESIK		106-120^b	VTTTPE(IKACSLTCL)
	16-30	RATKFLESIKGKFTS		111-125^b	E(IKACSLTCL)KSKNM
	31-45	PKDPKKKDSIISVNS		136-150	TLNPTHDIILCEFE
	51-65	TKESPITSNSTIINP		146-160	LCEFENIVTSKQVII
	56-70	ITSNSTIINPTNETD		181-195^c	TTTEFK(NAITNAKII)
	76-90	KPNYQRKPLVSFKED		186-200^c	K(NAITNAKII)PYSGL
	91-105	PTPSDNPFSKLYKET		191-205^c	(NAKII)PYSGLLLVIT
	96-110	NPFSKLYKETIETFD	221-235	QFIVDLGAYLEKESI	
	121-135	EEINDQTNDNITARL	M2-2	21-35	LITSRRCRVMTMYNQKN
	126-140	QTNDNITARLDRIDE	L	276-290	SLSRLNVCLITWISN
	131-145	ITARLDRIDEKLSEI		386-400	KTVSDNIINGRWIIL
	136-150	DRIDEKLSEILGMLH		426-440	FRIFGHPMVDERQAM
	141-155	KLSEILGMLHTLVVA		466-480	IYRIIKGFVNNYNRW
	151-165	TLVVASAGPTSARDG		491-505	LRWLTYKLNTPSL
	156-170	SAGPTSARDGIRDAM		501-510	TYPSELTERDLIV
	161-175	SARDGIRDAMIGLRE		506-515	LELTERDLIVLSGLR
	166-180	IRDAMIGLREEMIEK		526-540	RLPKKVDLEMIINDK
171-185	IGLREEMIEKIRTEA	536-550		IINDKAISPPKNLIW	
176-190	EMIEKIRTEALMTND	546-560		KNLIWTSFPRNYMPS	
181-195	IRTEALMTNDRLEAM	576-590		SDKSRRVLEYLRDN	
206-220	MAKDTSDVSLNPTS	586-600		YLRDNKFNECDLYNC	
221-235	EKLNNLLEGNDSDND	596-610		DLYNCVWQSYLNNP	
NS2	16-30	TDMRPLSLETIITSL		616-630	LTGKERELSVGRMFA
	21-35	LSLETIITSLTRDII		626-640	GRMFAMQPGMFRQVQ
	36-40	THKFIYLINHECIVR		666-680	ELQKILELKAGISNK
	56-70	QATFTFLVNYEMKLL		701-715	LSKFNQAFRYETSCI
	61-75	FLVNYEMKLLHKVGS		706-720	QAFRYETSCICSDVL
	66-80	EMKLLHKVGSTKYKK		736-750	TIPHVTIICTYRHAP
	96-110	FINHDGFLECIKIP	771-785	RYHMGGIEGW CQKLW	
NS1	101-115	GFLECIKIPKHTP	821-835	IRLMEGQTHAQADYL	
	31-45	TDKLIHLTNALAKAV	2016-2030^d	IFPVF(NVVQNAKLI)L	
	61-75^a	TSSD(ICPNNIVV)KS	2021-2035^d	(NVVQNAKLI)LSRTKN	
66-80^a	(CPNNIVV)KSNFTTM				
116-130	KLSDSTMTNYMNQLS				

^aLibrary peptides containing the entire or partial sequence of the confirmed CD8⁺ T cell epitope NS1₆₅₋₇₃.

^bLibrary peptides containing the entire sequence of the confirmed CD8⁺ T cell epitope M₁₁₂₋₁₂₀.

^cLibrary peptides containing the entire or partial sequence of the previously defined CD8⁺ T cell epitope M₁₈₇₋₁₉₅ (11).

^dLibrary peptides containing the entire sequence of the confirmed CD8⁺ T cell epitope L₂₀₂₁₋₂₀₂₉.

() Denotes 9-mer minimal core epitope sequences.