

1 **Table S7** Mapping of epitope complex #1A-D based on 391 complete and partial amino acid
 2 sequences from the NCBI GenBank database.

Linear A27 epitope aa 26-39	OPXV genera	Number of DB entries
KKPEAKREAIVKAD	VARV major	66/67
	VARV minor	2/2
	VACV	59/61
	BPXV	26/26
	HSPV	2/2
	RPXV	2/2
	CPXV	51/134
_KPEAKREAIVKAD	TaPXV	2/3
	CPXV	3/134
_KPEAKREAIVKA <u>E</u>	TaPXV	1/3
	CPXV	64/134
_KPEAKREAIVKA <u>E</u>	CPXV	2/134
KKPEAKREAI <u>I</u> KAD	CMLV	17/18
K <u>R</u> PEAKREAI <u>I</u> KAD	CMLV	1/18
K <u>R</u> PEAKREAIVKA <u>E</u>	CPXV	1/134
K <u>N</u> P <u>E</u> T <u>K</u> REAIVK <u>A</u> <u>Y</u>	MPXV	57/57
KKPE <u>D</u> K <u>H</u> EAT <u>V</u> KAD	ECTV	13/14
_KPE <u>D</u> K <u>H</u> EAT <u>V</u> KAD	ECTV	1/14
KKPEAK <u>H</u> EAIVKAD	VARV major	1/67
KKPEAK <u>H</u> EAIVKA <u>E</u>	CPXV	1/134
KK <u>Q</u> EAKREAIVKA <u>E</u>	CPXV	8/134
_K <u>Q</u> EAKREAIVKA <u>E</u>	CPXV	1/134
KKPEAKREAFVKA <u>E</u>	CPXV	1/134
KKPE <u>V</u> KREAIVKA <u>E</u>	CPXV	1/134
_KPE <u>K</u> R <u>K</u> A <u>V</u> VKA <u>E</u>	VPXV	1/1
KKP <u>D</u> R <u>K</u> RE <u>Q</u> IVKAD	VACV	1/61
_KPEAKR <u>K</u> <u>V</u> VEKAD	RCNV	1/1

<u>KSORLNAKQLLKLR</u>	CPXV	1/1
<u>TSRSSTGSANPSAS</u>	VACV	1/61
KKPE <u>EPV</u> KR <u>KVVKNKNKH</u> VVKAD (<u>aa 26-49</u>)	SkPXV	3/3

3 Differences within the epitope sequence are highlighted.