

Supplementary table 12. B cell Epitope prediction identifies 19 distinct peptide epitopes with 9 aminoacid variation sites in the 4 peptide epitopes (Bolded, Highlighted) over the CPV VP2 capsid protein of majority CPV recent strains (2023) on par with the CPV vaccine strains.

No.	Start	End	Peptide Epitopes	Length
1	4	56	GAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNNQTEFKFLEN	53
2	84	100	VNNLDKTAVNGNMLDD	17
3	134	138	SELHL	5
4	156	167	SATQPPTKVYNN	12
5	191	195	RSETL	5
6	200	203	WKPT	4
7	213	238	QWDRTLPSHTGTSGTPTNIYHGTDP	26
8	261	263	FAT	3
9	270	278	CKPCRLTHT	9
10	294	314	LPQAEGGTNFGYIGVQQDKRR	21
11	322	333	TNIITEATIMRP	12
12	345	443	FEASTQGPFKTPIAAGRGGGAQTDENRAADGDPYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINFNLPVTEED NVLLPTDPIGGKTGIN	99
13	458	463	NNVPPV	6
14	474	481	FDTDLKPR	8
15	507	520	TNEYDPDASANMSR	14
16	541	546	ASHTWN	6
17	551	562	MSINVDNQFNYYV	12
18	564	564	S	1
19	567	570	GGMK	4