

## Supplementary material:

**Table 1:** Result given by the epitope conservancy tool

Number	Epitope	Percentage of protein sequence matches at $\geq 100\%$	Minimum identity (%)	Maximum identity (%)
1	LSGTPPVY	100	100	100
2	PAAIASNCY	100	100	100
3	CYSSLILDY	100	100	100
4	YSSLILDYF	100	100	100
5	TTITKPLKY	100	100	100
6	ITKPLKYSY	100	100	100
7	STVWEDGDY	100	100	100
8	MTEQLQMGF	100	100	100

**Table 2:** B-cell antigenic determinants from the RBD (S367-S607) of S glycoprotein

Number	Start Position	End position	Peptide
1	4	11	SGSVVEQA
2	13	39	GVECDFSPLLSGTTPPVYNFKRLVFTN
3	41	84	NYNLTKLLSLFSVNDFTCSQISPAAIASNCYSSLILDYFSYPLS
4	88	97	DLSVSSAGPI
5	108	122	NPTCLILATVPHNLT
6	124	139	ITKPLKYSYINKCSRF
7	147	154	VPQLVNAN
8	156	166	YSPCVSIVPST
9	175	181	RKQLSPL
10	186	193	WLVASGST
11	205	211	GITVQYG
12	215	222	NSVCPKLE