

Protein	Region	Ferretti	Le Bert	Nelde	Peng	Schulien	Shomuradova	Snyder	Tarke	Patients	Vaccine Peptides
N	100-139	●	◐	●	◐	●	-	●	●	50.9% ( $n = 55$ )	N <sub>102-128</sub>
N	300-339	◐	◐	●	◐	●	-	○	●	36.2% ( $n = 34$ )	N <sub>301-327</sub> N <sub>305-331</sub> N <sub>310-336</sub> N <sub>324-350</sub>
S	1200-1228	◐	-	●	◐	◐	◐	○	◐	17.3% ( $n = 14$ )	S <sub>261-287</sub>
N	60-99	○	◐	●	◐	◐	-	○	◐	20.9% ( $n = 19$ )	
M	160-199	●	-	●	◐	-	-	○	●	57.3% ( $n = 47$ )	
S	240-277	●	-	●	○	-	●	○	●	71.4% ( $n = 35$ )	
nsp3	820-849	●	-	●	-	○	-	●	●	87.1% ( $n = 27$ )	
ORF3a	120-159	●	-	○	◐	●	-	○	●	30.3% ( $n = 23$ )	N <sub>324-350</sub>
N	211-235	◐	○	●	◐	◐	-	○	◐	39.3% ( $n = 22$ )	
N	340-374	●	○	●	◐	○	-	○	◐	28.6% ( $n = 20$ )	
ORF3a	200-239	●	-	○	◐	●	-	○	●	23.9% ( $n = 16$ )	
N	20-59	○	◐	●	○	○	-	○	●	40.5% ( $n = 17$ )	
S	861-895	○	-	○	◐	●	○	○	●	22.6% ( $n = 12$ )	S <sub>857-883</sub>
nsp13	387-405	◐	○	●	-	○	-	○	◐	35.7% ( $n = 10$ )	S <sub>788-814</sub> S <sub>809-835</sub>
S	801-839	○	-	○	◐	-	◐	○	◐	11.8% ( $n = 8$ )	
S	360-399	●	-	○	◐	-	○	○	◐	15.7% ( $n = 8$ )	
N	240-279	○	◐	○	○	◐	-	○	◐	29.6% ( $n = 8$ )	
nsp12	738-750	◐	-	○	-	●	-	○	●	66.7% ( $n = 8$ )	
S	424-459	○	-	○	◐	-	◐	○	◐	6.7% ( $n = 4$ )	S <sub>447-473</sub> S <sub>451-477</sub>
S	1171-1193	○	-	○	◐	-	◐	○	◐	5.2% ( $n = 3$ )	