

Product Datasheet

SARS-CoV-2 S2 N defined peptide pool

Product code:	3620-1
Contents:	<p>The SARS-CoV-2 S2 N defined peptide pool contains 41 peptides from the human SARS-CoV-2 virus. The peptides are derived from the spike and the nucleoprotein. The synthetic peptides are >95% pure.</p> <p>The SARS-CoV-2 derived T-cell epitopes were defined with the help of T-cell assays or MHC binding assays (Ahmed SF., <i>et al.</i>). Based on these assays this peptide pool covers the following MHC alleles: HLA-A*01:01, HLA-A*02:01, HLA-A*03:01, HLA-A*11:01, HLA-A*23:01, HLA-A*24:02, HLA-A*31:01, HLA-A*68:01, HLA-B*07:02, HLA-B*15:01, HLA-B*27:05, HLA-B*35:01, HLA-B*40, HLA-B*51:01, HLA-DRB1*01:01, and HLA-DRB1*04:01.</p>
Applications:	The peptide pool is recommended for quantification of the number of cytokine secreting T cells specific for SARS-CoV-2 S2 and N proteins with ELISpot/FluoroSpot. The peptide pool has been validated using human PBMC from COVID-19 convalescent individuals previously PCR-confirmed as SARS-CoV-2 positive.
Instructions:	<p>Sterile handling is recommended. Dissolve the lyophilized peptide pool by addition of 40 µl DMSO to the vial. Then add 85 µl PBS, mix and aliquote and store at -20°C or below. This stock solution will have a concentration of 200 µg/ml of each peptide.</p> <p>Dilute the stock solution 1:100 in cell culture medium to obtain 2 µg/ml of each peptide in the cell culture. Use the peptide pool in ELISpot and FluoroSpot assay for stimulation of 250,000 cells per well. Use the diluted peptide solution fresh.</p>
Storage:	Shipped at ambient temperature. Upon arrival, store frozen at -20°C or below. After reconstitution, store aliquotes at -20°C or below. The peptide solution may be stored for one month at 4-8°C without effects on stability. We recommend the aliquots not be refrozen after initial use.
Quantity:	25 µg of each peptide per vial (lyophilized).
	Reference: Ahmed SF., <i>et al.</i> Preliminary Identification of Potential Vaccine Targets for the COVID-19 Coronavirus (SARS-CoV-2) Based on SARS-CoV Immunological Studies. Viruses. 2020 Feb 25;12(3).



Note; for research use only.

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Peptides included in the SARS-CoV-2 S2 N defined peptide pool

Peptide	Sequence	Epitope source
1	LIDLQELGKY	Spike
2	GTTLPKGIFY	Nucleoprotein
3	VTPSGTWLTY	Nucleoprotein
4	ILLNKHID	Nucleoprotein
5	GMSRIGMEV	Nucleoprotein
6	ALNTPKDHI	Nucleoprotein
7	LALLLLDRL	Nucleoprotein
8	LLLDRLNQL	Nucleoprotein
9	LQLPQGTTL	Nucleoprotein
10	ALNTLVKQL	Spike
11	LITGRLQSL	Spike
12	NLNESLIDL	Spike
13	RLNEVAKNL	Spike
14	VLNDILSRL	Spike
15	VVFLHVTYV	Spike
16	GSFCTQLNR	Spike
17	GVVFLHVTY	Spike
18	AQALNTLVK	Spike
19	ASANLAATK	Spike
20	SLIDLQELGK	Spike
21	SVLNDILSR	Spike
22	VQIDRLITGR	Spike
23	KTFPPTPKK	Nucleoprotein
24	SASAFFGMSR	Nucleoprotein
25	ATEGALNTPK	Nucleoprotein
26	LSPRWYFYY	Nucleoprotein
27	APHGVVFLHV	Spike
28	APSASAFFG	Nucleoprotein
29	LQIPFAMQM	Spike
30	GRLQSLQTY	Spike
31	MEVTPSGTWL	Nucleoprotein
32	MEVTPSGT	Spike
33	AQFAPSASAFFGMSR	Nucleoprotein
34	YKTFPPTPKKDKKKK	Nucleoprotein
35	MAYRFNGIGVTQNVLY	Spike
36	QLIRAAEIRASANLAATK	Spike
37	QALNTLVKQLSSNFGAI	Spike
38	IDRLITGRLQSLQTY	Spike
39	IDAYKTFPPTPKKD	Nucleoprotein
40	MSRIGMEVTPSGTWL	Nucleoprotein
41	VLQLPQGTTLPKGFY	Nucleoprotein