PepPool: SARS-CoV-2 (S1), scanning

Product code: 3629-1

Contents: The SARS-CoV-2 S1 scanning pool contains 166 peptides from the human SARS-CoV-2 virus. The peptides are 15-mers overlapping with 11 amino acids, covering the S1 domain of the spike protein (amino acid 13-685). The pool is supplied in two vials: pool 1 SARS-CoV-2 S1 peptides 1-83 (83 peptides) and pool 2 SARS-CoV-2 S1 peptides 84-166 (83 peptides). The mean purity of the synthetic peptides is 80%.

Applications: The peptide pool is recommended for enumeration of cytokine secreting T cells specific for the SARS-CoV-2 S1 protein 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. The peptides can also induce specific T-cell responses in splenocytes from mice immunized with SARS-CoV-2 spike protein.

Instructions: Sterile handling is recommended. The SARS-CoV-2 S1 pools can either be used separately or mixed. If used separately, dissolve the lyophilized peptide pools by addition of 40 µl DMSO to each vial, then add 85 µl PBS. If mixed, first add 40 µl DMSO to pool 1 and transfer the solution into pool 2, then add 85 µl PBS. The concentration of these stock solutions are 200 µg/ml of each peptide. Aliquote the pools and store at -20°C or below. This stock solution will have a concentration of 200 µg/ml of each peptide.

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.

Storage: Shipped at ambient temperature. Store frozen at -20°C or below upon receipt. After reconstitution, store aliquotes at -20°C or below. We recommend the aliquots not be refrozen after initial use.

Quantity: Two vials (pool 1+2), 25 µg of each peptide

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Note; for research use only.
Mabtech shall not be liable for the use or handling of the product or for consequential, special, indirect or incidental damages therefrom.

Developed and manufactured by MABTECH AB, Sweden, whose quality management system complies with the standards ISO 9001:2015 & ISO 13485:2016.

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Peptides included in PepPool: SARS-CoV-2 (S1), scanning

Peptide	Sequence
Pool 1 (1-83)	
1	SQCVNLTTRTQLPPA
2	NLTTRTQLPPAYTNS
3	RTQLPPAYTNSFTRG
4	PPAYTNSFTRGVYYP
5	TNSFTRGVYYPDKVF
6	TRGVYYPDKVFRSSV
7	YYPDKVFRSSVLHST
8	KVFRSSVLHSTQDLF
9	SSVLHSTQDLFLPFF
10	HSTQDLFLPFFSNVT
11	DLFLPFFSNVTWFHA
12	PFFSNVTWFHAIHVS
13	NVTWFHAIHVSGTNG
14	FHAIHVSGTNGTKRF
15	HVSGTNGTKRFDNPV
16	TNGTKRFDNPVLPFN
17	KRFDNPVLPFNDGVY
18	NPVLPFNDGVYFAST
19	PFNDGVYFASTEKSN
20	GVYFASTEKSNIIRG
21	ASTEKSNIIRGWIFG
22	KSNIIRGWIFGTTLD
23	IRGWIFGTTLDSKTQ
24	IFGTTLDSKTQSLLI
25	TLDSKTQSLLIVNNA
26	KTQSLLIVNNATNVV
27	LLIVNNATNVVIKVC
28	NNATNVVIKVCEFQF
29	NVVIKVCEFQFCNDP
30	KVCEFQFCNDPFLGV
31	FQFCNDPFLGVYYHK
32	NDPFLGVYYHKNNKS
33	LGVYYHKNNKSWMES
34	YHKNNKSWMESEFRV
35	NKSWMESEFRVYSSA
36	MESEFRVYSSANNCT
37	FRVYSSANNCTFEYV
38	SSANNCTFEYVSQPF
39	NCTFEYVSQPFLMDL
40	EYVSQPFLMDLEGKQ
41	QPFLMDLEGKQGNFK
42	MDLEGKQGNFKNLRE
43	GKQGNFKNLREFVFK
44	NFKNLREFVFKNIDG
45	LREFVFKNIDGYFKI
46	VFKNIDGYFKIYSKH
47	IDGYFKIYSKHTPIN
48	FKIYSKHTPINLVRD
49	SKHTPINLVRDLPQG
50	PINLVRDLPQGFSAL
51	VRDLPQGFSALEPLV
52	PQGFSALEPLVDLPI
53	SALEPLVDLPIGINI
54	PLVDLPIGINITRFQ

Peptide	Sequence
57	RFQTLLALHRSYLTP
58	LLALHRSYLTPGDSS
59	HRSYLTPGDSSSGWT
60	LTPGDSSSGWTAGAA
61	DSSSGWTAGAAAYYV
62	GWTAGAAAYYVGYLQ
63	GAAAYYVGYLQPRTF
64	YYVGYLQPRTFLLKY
65	YLQPRTFLLKYNENG
66	RTFLLKYNENGTITD
67	LKYNENGTITDAVDC
68	ENGTITDAVDCALDP
69	ITDAVDCALDPLSET
70	VDCALDPLSETKCTL
71	LDPLSETKCTLKSFT
72	SETKCTLKSFTVEKG
73	CTLKSFTVEKGIYQT
74	SFTVEKGIYQTSNFR
75	EKGIYQTSNFRVQPT
76	YQTSNFRVQPTESIV
77	NFRVQPTESIVRFPN
78	QPTESIVRFPNITNL
79	SIVRFPNITNLCPFG
80	FPNITNLCPFGEVFN
81	TNLCPFGEVFNATRF
82	PFGEVFNATRFASVY
83	VFNATRFASVYAWNR
Pool 2 (84-166)	
84	TRFASVYAWNRKRIS
85	SVYAWNRKRISNCVA
86	WNRKRISNCVADYSV
87	RISNCVADYSVLYNS
88	CVADYSVLYNSASFS
89	YSVLYNSASFSTFKC
90	YNSASFSTFKCYGVS
91	SFSTFKCYGVSPTKL
92	FKCYGVSPTKLNDLC
93	GVSPTKLNDLCFTNV
94	TKLNDLCFTNVYADS
95	DLCFTNVYADSFVIR
96	TNVYADSFVIRGDEV
97	ADSFVIRGDEVRQIA
98	VIRGDEVRQIAPGQT
99	DEVRQIAPGQTGKIA
100	QIAPGQTGKIADYNY
101	GQTGKIADYNYKLPD
102	KIADYNYKLPDDFTG
103	YNYKLPDDFTGCVIA
104	LPDDFTGCVIAWNSN
105	FTGCVIAWNSNNLDS
106	VIAWNSNNLDSKVGG
107	NSNNLDSKVGGNYNY
108	LDSKVGGNYNYLYRL
109	VGGNYNYLYRLFRKS

Peptide	Sequence
112	RKSNLKPFERDISTE
113	LKPFERDISTEIYQA
114	ERDISTEIYQAGSTP
115	STEIYQAGSTPCNGV
116	YQAGSTPCNGVEGFN
117	STPCNGVEGFNCYFP
118	NGVEGFNCYFPLQSY
119	GFNCYFPLQSYGFQP
120	YFPLQSYGFQPTNGV
121	QSYGFQPTNGVGYQP
122	FQPTNGVGYQPYRVV
123	NGVGYQPYRVVVLSF
124	YQPYRVVVLSFELLH
125	RVVVLSFELLHAPAT
126	LSFELLHAPATVCGP
127	LLHAPATVCGPKKST
128	PATVCGPKKSTNLVK
129	CGPKKSTNLVKNKCV
130	KSTNLVKNKCVNFNF
131	LVKNKCVNFNFNGLT
132	KCVNFNFNGLTGTGV
133	FNFNGLTGTGVLTES
134	GLTGTGVLTESNKKF
135	TGVLTESNKKFLPFQ
136	TESNKKFLPFQQFGR
137	KKFLPFQQFGRDIAD
138	PFQQFGRDIADTTDA
139	FGRDIADTTDAVRDP
140	IADTTDAVRDPQTLE
141	TDAVRDPQTLEILDI
142	RDPQTLEILDITPCS
143	TLEILDITPCSFGGV
144	LDITPCSFGGVSVIT
145	PCSFGGVSVITPGTN
146	GGVSVITPGTNTSNQ
147	VITPGTNTSNQVAVL
148	GTNTSNQVAVLYQDV
149	SNQVAVLYQDVNCTE
150	AVLYQDVNCTEVPVA
151	QDVNCTEVPVAIHAD
152	CTEVPVAIHADQLTP
153	PVAIHADQLTPTWRV
154	HADQLTPTWRVYSTG
155	LTPTWRVYSTGSNVF
156	WRVYSTGSNVFQTRA
157	STGSNVFQTRAGCLI
158	NVFQTRAGCLIGAEH
159	TRAGCLIGAEHVNNS
160	CLIGAEHVNNSYECD
161	AEHVNNSYECDIPIG
162	NNSYECDIPIGAGIC
163	ECDIPIGAGICASYQ
164	PIGAGICASYQTQTN
165	GICASYQTQTNSPRR
166	SYQTQTNSPRRAR

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