

PepPool: SARS-CoV-2 Omicron BA.1 (S1), scanning

Product code: 3636-1

Contents: SARS-CoV-2 (Omicron BA.1) S1 scanning pool contains 168 peptides from the human SARS-CoV-2 virus variant Omicron (B.1.1.529), lineage BA.1. The peptides are 15-mers overlapping with 11 amino acids, covering the S1 domain of the spike protein. The peptide pool contains mutations: A67V, _DELTA_69-70, T95I, G142D, _DELTA_143-145, _DELTA_211, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H of Omicron BA.1 spike S1.

The pool is supplied in two vials: Pool 1: SARS-CoV-2 (Omicron BA.1) S1 peptides 1-84 (84 peptides) and pool 2: SARS-CoV-2 (Omicron BA.1) S1 peptides 85-168 (84 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 Omicron BA.1 S1 protein with ELISpot/FluoroSpot. The peptide pool has been validated using human PBMC from COVID-19 convalescent individuals and vaccinated individuals.

Instructions: Sterile handling is recommended. Pool 1 and pool 2 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. 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

MABTECH

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.

Mabtech AB (Head Office)
Sweden
Tel: +46 8 716 27 00
mabtech@mabtech.com
Updated on 2022-11-22

Mabtech, Inc.
USA
Tel: +1 513 871-4500
mabtech.usa@mabtech.com



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

Peptides included in PepPool: SARS-CoV-2 Omicron BA.1 (S1), scanning

Peptide	Sequence
Pool 1 (1-84)	
1	MFVFLVLLPLVSSQC
2	LVLLPLVSSQCVNLT
3	PLVSSQCVNLTTRTQ
4	SQCVNLTTRTQLPPA
5	NLTTRTQLPPAYTNS
6	RTQLPPAYTNSFTRG
7	PPAYTNSFTRGVVYP
8	TNSFTRGVVYPDKVF
9	TRGVVYPDKVFRSSV
10	YYPDKVFRSSVLHST
11	KVFRSSVLHSTQDLF
12	SSVLHSTQDLFLPFF
13	HSTQDLFLPFFSNVT
14	DLFLPFFSNVTFWHV
15	PFFSNVTFWHVISGT
16	NVTFWHVISGTNGTK
17	FHVISGTNGTKRFDN
18	SGTNGTKRFDNPVLP
19	GTKRFDNPVLPFNDG
20	FDNPVLPFNDGVYFA
21	VLFPNDGVYFASIEK
22	NDGVYFASIEKSNII
23	YFASIEKSNIIIRGWI
24	IEKSNIIIRGWIFGTT
25	NIIRGWIFGTTLDSK
26	GWIFGTTLDSKTQSL
27	GTTLDSKTQSLIIVN
28	DSKTQSLIIVNATN
29	QSLIIVNATNVVIK
30	IVNATNVVIKVECF
31	ATNVVIKVECFQFCN
32	VIKVECFQFCNDPFL
33	CEFQFCNDPFLDHKN
34	FCNDPFLDHKNKNSW
35	PFLDHKNKNSWMESE
36	HKNNKNSWMESEFRVY
37	KSWMESEFRVYSSAN
38	ESEFRVYSSANCTF
39	RVYSSANCTFEYVS
40	SANCTFEYVSQPFL
41	CTFEYVSQPFLMDLE
42	YVSQPFLMDLEKQGG
43	PFLMDLEKQGNFKN
44	DLEKQGNFKNLREF
45	KQGNFKNLREFVFNK
46	FKNLREFVFNKIDGY
47	REFVFNKIDGYFKIY
48	FKIDGYFKIYSKHT
49	DGYFKIYSKHTPIIV
50	KIYSKHTPIIVREPE
51	KHTPIIVREPEDLPQ
52	IIVREPEDLPQGFS
53	EPEDLPQGFSALEPL
54	LPQGFSALEPLVDLP
55	FSALEPLVDLPIGIN
56	EPLVDLPIGINITRF

Peptide	Sequence
57	DLPIGINITRFQTL
58	GINITRFQTLALHR
59	TRFQTLALHRSYLT
60	TLLALHRSYLTPGDS
61	LHRSYLTPGDSSSGW
62	YLTPGDSSSGWTAGA
63	GDSSSGWTAGAAAYY
64	SGWTAGAAAYYVGYL
65	AGAAAYYVGYLQPR
66	AYYVGYLQPRFLLK
67	GYLQPRFLLKYNEN
68	PRTFLLKYNENGTIT
69	LLKYNENGTITDAVD
70	NENGTITDAVDCALD
71	TITDAVDCALDPLSE
72	AVDCALDPLSETKCT
73	ALDPLSETKCTKSF
74	LSETKCTKSFTEVEK
75	KCTKSFTEVEKGIYQ
76	KSFTVEKGIYQTSNF
77	VEKGIYQTSNFRVQP
78	IYQTSNFRVQPTESE
79	SNFRVQPTESEVRF
80	VQTESEVRFNITN
81	ESVRFNITNLCPF
82	RFPNITNLCPFDEVF
83	ITNLCPFDEVFNATR
84	CPFDEVFNATRFASV

Pool 2 (85-168)

85	EVFNATRFASVYAWN
86	ATRFASVYAWNKRRI
87	ASVYAWNKRKISNCV
88	AWNKRKISNCVADYS
89	KRISNCVADYSVLYN
90	NCVADYSVLYNLAPF
91	DYSVLYNLAPFFTFK
92	LYNLAPFFTFKCYGV
93	APFFTFKCYGVSPK
94	TFKCYGVSPKLNLDL
95	YGVSPKLNLDLCFTN
96	PTKLNLDLCFTNVYAD
97	NLDLCFTNVYADSVI
98	FTNVYADSVIRGDE
99	YADSVIRGDEVRQI
100	FVIRGDEVRQIAPGQ
101	GDEVRQIAPGQTGNI
102	RQIAPGQTGNIADYN
103	PGQTGNIADYNYKLP
104	GNIADYNYKLPDDFT
105	DYNYKLPDDFTGCVI
106	KLPDDFTGCVIAWNS
107	DFTGCVIAWNSNKLD
108	CVIAWNSNKLDKSVS
109	WNSNKLDKSVSGNYN
110	KLDSKSVSGNYNYLYR
111	KVSGNYNYLYRLFRK

Peptide	Sequence
112	NYNYLYRLFRKSNLK
113	LYRLFRKSNLKPFR
114	FRKSNLKPFRDIST
115	NLKPFRDISTEIQ
116	FERDISTEIQAGNK
117	ISTEIQAGNKPCNG
118	IYQAGNKPCNGVAGF
119	GNKPCNGVAGFNCF
120	CNGVAGFNCFPLRS
121	AGFNCFPLRSYSFR
122	CYFPLRSYSFRPTYG
123	LRSYSFRPTYGVGHQ
124	SFRPTYGVGHQPYRV
125	TYGVGHQPYRVVLS
126	GHQPYRVVLSFELL
127	YRVVLSFELLHAPA
128	VLSFELLHAPATVCG
129	ELLHAPATVCGPKKS
130	APATVCGPKKSTNLV
131	VCGPKKSTNLVKNKC
132	KKSTNLVKNKCVNFN
133	NLVKNKCVNFNENGL
134	NKCVNFNENGLKGTG
135	NFNENGLKGTGVLTE
136	NGLKGTGVLTESNKK
137	GTGVLTESNKKFLPF
138	LTESNKKFLPFQFQ
139	NKKFLPFQFQGRDIA
140	LPFQFQGRDIADTTD
141	QFGRDIADTTDAVRD
142	DIADTTDAVRDQPQL
143	TTDAVRDQPQLLEILD
144	VRDQPQLLEILDITPC
145	QLEILDITPCSFQGG
146	ILDITPCSFQGGVSVI
147	TPCSFQGGVSVITPGT
148	FGGVSVITPGTNTSN
149	SVITPGTNTSNQVAV
150	PGTNTSNQVAVLYQG
151	TSNQVAVLYQGVNCT
152	VAVLYQGVNCTEVPV
153	YQGVNCTEVPVAIHA
154	NCTEVPVAIHADQLT
155	VPVAIHADQLTPTWR
156	IHADQLTPTWRVYST
157	QLTPTWRVYSTGSNV
158	TWRVYSTGSNVFQTR
159	YSTGSNVFQTRAGCL
160	SNVFQTRAGCLIGAE
161	QTRAGCLIGAEYVNN
162	GCLIGAEYVNNSEYEC
163	GAEYVNNSEYECDIPI
164	VNNSEYECDIPIGAGI
165	YECDIPIGAGICASY
166	IPIGAGICASYQTQT
167	AGICASYQTQTKSHR
168	ASYQTQTKSHRRAR