

Supplementary Table S1. Sequences of the 20-mer peptides derived from the AAV-2 VP1 capsid protein

Each VP1 peptide was synthesized with a 12-mer consensus overlap with adjacent peptides. Peptides 90 and 91 had a 17-mer overlap.

Donor	Sequence	Donor	Sequence
1	MAADGYLPDWLEDTLSEGIR	23	GDADSVDPDPQLGQPPAAPS
2	DWLEDTLSEGIRQWWKLKPG	24	PQPLGQPPAAPSGLGTNTMA
3	EGIRQWWKLKPGPPPKPAE	25	AAPSGLGTNTMATGSGAPMA
4	LKPGPPPKPAERHKDDSRG	26	NTMATGSGAPMADNNEGADG
5	KPAERHKDDSRGLVLPGYKY	27	APMADNNEGADGVGNSSGNW
6	DSRGLVLPGYKYLGPFNGLD	28	GADGVGNSSGNWHCDSTWMG
7	GYKYLGPFNGLDKGEPVNEA	29	SGNWHCDSTWMGDRVITTST
8	NGLDKGEPVNEADAAALEHD	30	TWMGDRVITTSTRTWALPTY
9	VNEADAAALEHDKAYDRQLD	31	TTSTRTWALPTYNNHLYKQI
10	LEHDKAYDRQLDSGDNPYLK	32	LPTYNNHLYKQISSQSGASN
11	RQLDSGDNPYLKYNHADAEF	33	YKQISSQSGASNDNHYFGYS
12	PYLKYNHADADEFQERLKEDT	34	GASNDNHYFGYSTPWGYFDF
13	DAEFQERLKEDTSFGGNLGR	35	FGYSTPWGYFDFNRFHCHFS
14	KEDTSFGGNLGRAVFQAKKR	36	YDFNRFHCHFSPRDWQRLLI
15	NLGRAVFQAKKRVLEPLGLV	37	CHFSPRDWQRLINNNWGFRP
16	AKKRVLEPLGLVEEPVKTAP	38	QRLINNNWGFRPKRLNFKLF
17	LGLVEEPVKTAPGKKRPVEH	39	GFRPKRLNFKLFNIQVKEVT
18	KTAPGKKRPVEHSPVEPDSS	40	FKLFNIQVKEVTQNDGTTTI
19	PVEHSPVEPDSSSGTGKAGQ	41	KEVTQNDGTTTIANNLTSTV
20	PDSSSGTGKAGQQPARKRLN	42	TTTIANNLTSTVQVFTDSEY
21	KAGQQPARKRLNFGQTGDAD	43	TSTVQVFTDSEYQLPYVLGS
22	KRLNFGQTGDADSVDPDPQL	44	DSEYQLPYVLGSAHQGCLPP

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Donor	Sequence	Donor	Sequence
45	VLGSAHQGCLPPFPADVFMV	70	DIEKVMITDEEEIRTTNPVA
46	CLPPFPADVFMVPQYGYLTL	71	DEEEIRTTNPVATEQYGSVS
47	VFMVPQYGYLTLNNGSQAVG	72	NPVATEQYGSVSTNLQRGNR
48	YLTLNNGSQAVGRSSFYCLE	73	GSVSTNLQRGNRQAATADV N
49	QAVGRSSFYCLEYFPSQMLR	74	RGNRQAATADVNTQGVLPGM
50	YCLEYFPSQMLRTGNNFTFS	75	ADVNTQGVLPGMVWQDRDVY
51	QMLRTGNNFTFSYTFEDVPF	76	LPGMVWQDRDVYLQGPWAK
52	FTFSYTFEDVPFHSSYAHSQ	77	RDVYLQGPWAKIPHTDGHF
53	DVPFHSSYAHSQSLDRLMNP	78	IWAKIPHTDGHFHPSPLMGG
54	AHSQSLDRLMNPLIDQYLYY	79	DGHFHPSPLMGGFGLKHPPP
55	LMNPLIDQYLYYLSRTNTPS	80	LMGGFGLKHPPPQILIKNTP
56	YLYYLSRTNTPSGTTTQSRL	81	HPPPQILIKNTPVPANPSTT
57	NTPSGTTTQSRLQFSQAGAS	82	KNTPVPANPSTTFSAAKFAS
58	QSRLQFSQAGASDIRDQSRN	83	PSTTFSAAKFASFITQYSTG
59	AGASDIRDQSRNWLPGPCYR	84	KFASFITQYSTGQVSVEIEW
60	QSRNWLPGPCYRQQRVSKTS	85	YSTGQVSVEIEWELQKENS K
61	PCYRQQRVSKTSADNNNSEY	86	EIEWELQKENS KRWNPEIQY
62	SKTSADNNNSEYSWTGATKY	87	ENSKRWNPEIQYTSNYNKS V
63	NSEYSWTGATKYHLNGRDSL	88	EIQYTSNYNKS VNVDFTVDT
64	ATKYHLNGRDSL VNPGPAMA	89	NKSVNVDFTVDTNGVYSEPR
65	RDSL VNPGPAMASHKDDEEK	90	TVDTNGVYSEPRPIGTRYLT
66	PAMASHKDDEEKFFPQSGVL	91	TNGVYSEPRPIGTRYLTRNL
67	DEEKFFPQSGVLIFGKQGSE		
68	SGVLIFGKQGSEKTNVDIEK		
69	QGSEKTNVDIEKVMITDEEE		

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Supplementary Table S2. AAV-2 VP1 capsid sequences recognized by human PBMC

No proliferative response was detected for the following peptides (omitted from the table): 5, 6, 11, 12, 18–21, 23, 24, 26–28, 34, 35, 42–45, 51–53, 66, 68, 71–73, 76, 77, 81, 82 and 89.

Peptide	Donor	Sequence	Peptide	Donor	Sequence
1	16, 50	DWLEDTLSEGIR	37	16	QRLINNNWGFRP
2	50	EGIRQWWKLKPG	38	16	GFRPKRLNFKLF
3	50	LKPGPPPKPAE	39	16, 50	FKLFNIQVKEVT
4	50	KPAERHKDDSRG	40	16, 19, 50, 51	KEVTQNDGTTTI
7	16, 50	NGLDKGEPVNEA	41	19, 50	TTTIANNLTSTV
8	50	VNEADAAALEHD	46	16	CLPPFPADVFMV
9	50	LEHDKAYDRQLD	47	16	VFMVPQYGYLTL
10	50	RQLDSGDNPYLK	48	50	YLTLNNGSQAVG
13	50	KEDTSFGGNLGR	49	50	QAVGRSSFYCLE
14	50, 51	NLGRAVFQAKKR	50	16, 50	YCLEYFPSQMLR
15	40, 50	AKKRVLEPLGLV	54	16	AHSQSLDRLMNP
16	50	LGLVEEPVKTAP	55	16	LMNPLIDQYLYY
17	50	KTAPGKKRPVEH	56	13	YLYYLSRTNTPS
22	16	GDADSVDPQPL	57	13	NTPSGTTTQSRL
25	51	NTMATGSGAPMA	58	13, 16	QSRLQFSQAGAS
29	50	TWMGDRVITTST	59	16	AGASDIRDQSRN
30	16, 50, 51	TTSTRTWALPTY	60	50	QSRNWLPGPCYR
31	16, 51	LPTYNNHLYKQI	61	50	PCYRQQRVSKTS
32	16, 51	YKQISSQSGASN	62	50	SKTSADNNNSEY
33	16, 51	GASNDNHYFGYS	63	50	NSEYSWTGATKY
36	16	CHFSPRDWQRLLI	64	13, 50, 51	ATKYHLNGRDSL

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Peptide	Donor	Sequence	Peptide	Donor	Sequence
65	13	RDSLVNPGPAMA	83	16	PSTTFSAAKFAS
67	51	DEEKFFPQSGVL	84	51	KFASFITQYSTG
69	50	QGSEKTNVDIEK	85	51	YSTGQVSVEIEW
70	13, 50	DIEKVMITDEEE	86	13, 50, 51	EIEWELQKENSK
74	16	RGNRQAATADVN	87	13	ENSKRWNPEIQY
75	13	ADVNTQGVLPGM	88	13	EIQYTSNYNKS
78	13	IWAKIPHTDGHF	90	51	TVDTNGVYSEPR
79	13	DGHFHPSPLMGG	91	16, 51	TNGVYSEPRPIGTRYLT
80	13	LMGGFGLKHPPP			

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