Supplementary Table S1. Genomic sequences of 116 human mastadenovirus D genotypes used in the phylogenetic analyses with their corresponding GenBank accession numbers

Accession number	Strain name	Serotype or genotype
OR777165.1	HAdV-C1/USA/2P8/2020	C1
PP079214.1	HAdV-C2/USA/9C10/2012	C2
AY599836.1	HAdV-B3/USA/NHRC 1276/1997	B3
KX384948.1	HAdV-E4/USA/RDU2954/1966	E4
KF429754.1	HAdV-C5/USA/Pitts_00149/1990	C5
FJ349096.1	HAdV-C6/USA/Tonsil 99 prototype/1953	C6
AY594255.1	HAdV-B7/Gomen	B7
MW815973.1	HAdV-B7/CHN/Hubei/18B4089967/2019	B7
AB448767.1	HAdV-D8/JPN/Trim D8	D8
AB679747.1	HAdV-D8/JPN/Sapporo1991/1991	D8
AJ854486.1	HAdV-D9/DEU/ATCC VR-1086	D9
JN226746.1	HAdV-D10/USA	D10
AF532578.1	HAdV-B11/SWE/Slobitski	B11
MT505438.1	HAdV-B11/USA_GA/8346/2019	B11
KX868289.2	HAdV-A12/SWE/GyK010/1978	A12
JN226747.1	HAdV-D13/USA/1955	D13
KP896482.1	HAdV-B14/CHN Gansu/DH01/2013	B14
AB562586.1	HAdV-D15/JPN/CH38/2008	D15

Accession number	Strain name	Serotype or genotype
AY601636.1	HAdV-B16/USA/ch.79	B16
JN860680.1	HAdV-B16/EGY/E26	B16
HQ910407.1	HAdV-D17/SAU/1955	D17
GU191019.1	HAdV-A18/USA/D.C./1954	A18
AB448773.1	HAdV-D19/JPN/1997	D19
JN226749.1	HAdV-D20/SAU/1955	D20
MH923228.1	HAdV-B21/USA_NY/10208/2018 [P21H21F21]	B21
FJ404771.1	HAdV-D22/SAU/AV-2711/1956	D22
JN226750.1	HAdV-D23/SAU/1956	D23
JN226751.1	HAdV-D24/SAU/1956	D24
JN226752.1	HAdV-D25/USA/1956	D25
EF153474.1	HAdV-D26/NLD	D26
JN226753.1	HAdV-D27/USA/1958	D27
FJ824826.1	HAdV-D28/USA/BP-5; ATCC VR-226	D28
AB562587.1	HAdV-D29/JPN/BP6/2008	D29
JN226755.1	HAdV-D30/USA/BP-7-1/1959 [P30H30F30]	D30
MZ983552.1	HAdV-A31/DEU/20161068/2007	A31
JN226756.1	HAdV-D32/USA/1965	D32
JN226758.1	HAdV-D33/USA/1965	D33
AY737797.1	HAdV-B34/Compton ATCC VR-716/1972	B34
AY128640.	HAdV-B35/USA/ATCC VR-718; Holden	B35

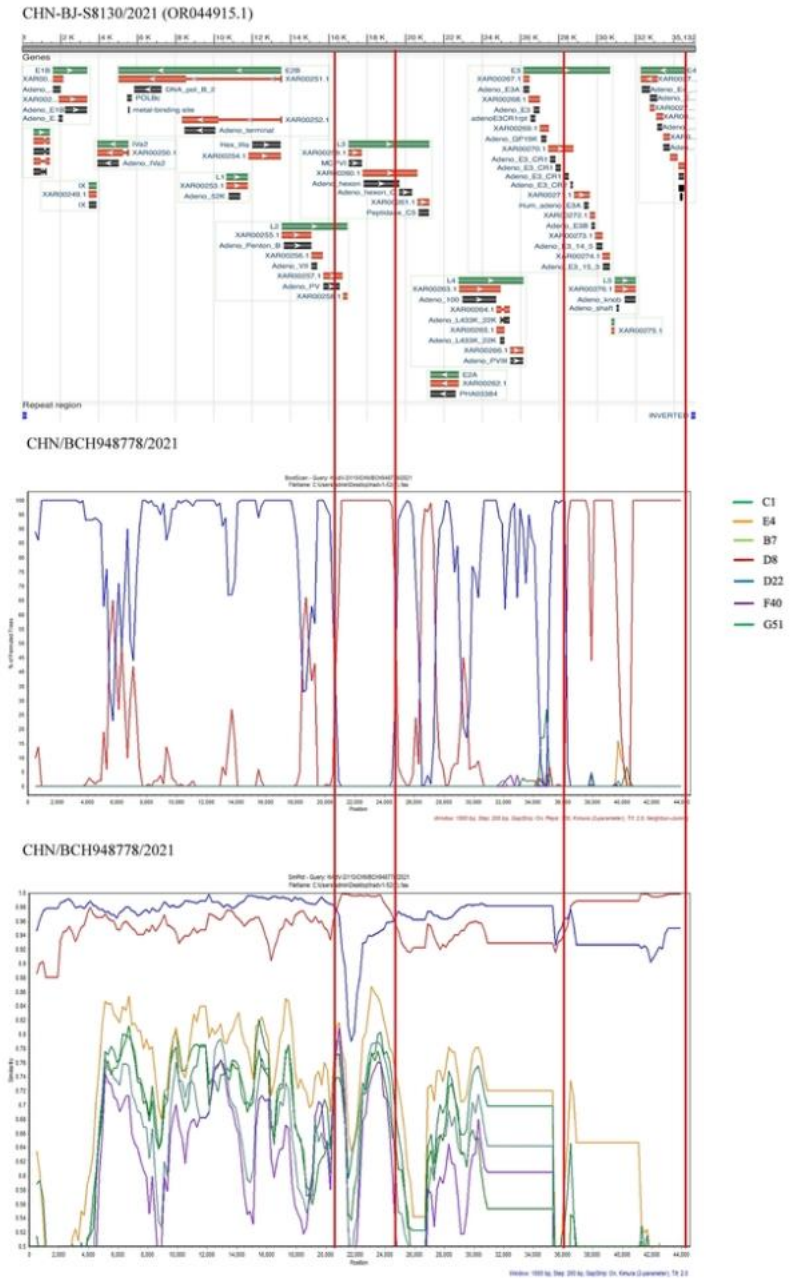
Accession number	Strain name	Serotype or genotype
2 GQ384080.1	HAdV-D36/USA/2008	D36
AB448776.1	HAdV-D37/JPN/1991	D37
JN226759.1	HAdV-D38/NLD	D38
JN226760.1	HAdV-D39/SLV/1977	D39
KU162869.1	HAdV-F40/FIN/HoviX/1979	F40
KX868523.2	HAdV-F41/SWE/GyK253/2000	F41
JN226761.1	HAdV-D42/FRA/1982	D42
KC529648.1	HAdV-D43/USA/1309/1981	D43
JN226763.1	HAdV-D44/USA/1982	D44
JN226764.1	HAdV-D45/USA/1982	D45
AY875648.1	HAdV-D46/USA	D46
JN226757.1	HAdV-D47/USA/1982	D47
EF153473.1	HAdV-D48	D48
DQ393829.1	HAdV-D49	D49
AY737798.1	HAdV-B50/USA/Wan ATCC VR1502	B50
JN226765.1	HAdV-D51/NLD/1989	D51
DQ923122.2	HAdV-G52/T03-2244/2003	G52
FJ169625.1	HAdV-D53/DEU/IAI-1/2005 [P37H22F8/2005/DEU]	D53
AB333801.2	HAdV-D54/JPN/2000 [P54H54F8/2000/JPN 2009]	D54
FJ643676.1	HAdV-B55/CHN/QS-DLL/2009 [P14H11F14/2006/CHN]	B55

Accession number	Strain name	Serotype or genotype
KF268333.1	HAdV-D56/USA/CL_50/1992 [P56/H56/F56]	D56
HQ003817.1	HAdV-C57/RUS/16700/2001 [P1H57F6/2001/RUS]	C57
HQ883276.1	HAdV-D58/ARG/AdCor-96-487/1996 [P58H58F29/1996/ARG]	D58
JF799911.1	HAdV-D59/USA/CDPH/2007 [P64H25F56/2007/USA]	D59
HQ007053.1	HAdV-D60/CAN/SW/2009 [P60H20F60/2009/CAN]	D60
JF964962.1	HAdV-A61/JPN/2004/5082/[P31H31F31/2004/JPN]	A61
JN162671.1	HAdV-D62/GBR/Aids25/1993 [P62H62F62/1993/GBR]	D62
JN935766.1	HAdV-D63/USA/BP-7-2/1959 [P30H30F29/1959/USA]	D63
EF121005.1	HAdV-D64/USA/C/1993 [P22H19F37/1993/USA]	D64
AP012285.1	HAdV-D65/BGD/B172/2004 [P58H10F9/2004/BGD]	D65
JN860676.1	HAdV-B66/ARG/87-922/1987 [P7H7F3/1987/ARG]	B66
AP012302.1	HAdV-D67/BGD/2005/B109/2013 [P67H9F67/2005/BGD]	D67
JN860678.1	HAdV-B68/ARG/827/2004 [P16H3F16/2004/ARG]	B68
JN226748.1	HAdV-D69/SAU/CH38/1955 [P37H15F69/1955/SAU]	D69
KP641339.1	HADV-D70/DEU/Leipzig/2014 [P70H70F29/2014/DEU]	D70
KF268207.1	HAdV-D71/DEU/HEIM_00085/1987 [P9H20F71]	D71
KF268335.1	HADV-D72/DEU/HEIM_00088/1985 [P72H30F72/1985/DEU]	D72
KY618676.1	HAdV-D73/DEU/Leipzig/2015 [P67H45F27/2015]	D73
KY618677.1	HADV-D74/DEU/Leipzig/2015 [P70H74F51/2015/DEU]	D74
KY618678.1	HAdV-D75/DEU/Leipzig/2015 [P75H26F58/2015/DEU]	D75
KF633445.	HAdV-B76/DEU/HEIM_00086/2013 [P21H21F16/DEU]	B76

Accession number	Strain name	Serotype or genotype
KF268328.1	HAdV-B77/DEU/HEIM_00092/1985 [P35H34F7/1985/DEU]	B77
KT970441.1	HAdV-B78/USA/CHOP2146-10810/2013 [P11H11F7/2013/USA]	B78
LC177352.1	HAdV-B79/JPN/T150125/2015 [P11H34F11/2015/JPN]	B79
KY618679.1	HAdV-D80/DEU/Berlin/2014 [P19/23H28F22]	D80
AB765926.1	HAdV-D81/JPN/Chiba_E086/2012 [P65H48F60/2012/JPN]	D81
LC066535.1	HADV-D82/JPN/OIPH23/2011 [P56H15F37/2011/JPN]	D82
KX827426.1	HADV-D83/PAR/Py52A/2010 [P83H9F15/2010/PAR]	D83
MF416150.1	HADV-D84/PAN/P309886/2011 [P43H17F84/2011/PAN]	D84
LC314153.1	HAdV-D85/JPN/Kumamoto_20151587C/2015 [P37H19F8/2015/JPN]	D85
KX868297.2	HAdV-D86/SWE/GyK018/1978 [P9H25F25/1978/SWE]	D86
MF476841.1	HADV-D87/USA/MEE-KIPA/1967 [P9H15F25/1967/USA]	D87
MF476842.1	HADV-D88/USA/MEE-MOLD/1963 [P88H15F9/1963/USA]	D88
MH121097.1	HAdV-C89/DEU/29C2/2015 [P89H2F2/2015/DEU 2019]	C89
MH574893.1	HAdV-D90/BGD/Dhaka/2017 [P33H27F67/2017/BGD]	D90
KF268208.1	HAdV-D91/DEU/HEIM_00093/2019 [P37H37F17/DEU]	D91
KF268325.1	HAdV-D92/DEU/HEIM_00090/1986 [P92H32F27/1986/DEU]	D92
KF268334.1	HAdV-D93/DEU/HEIM_00094/1988 [P28H37F38/1988/DEU]	D93
KF268201.1	HAdV-D94/DEU/HEIM_00080/1982 [P33H15F9/1982/DEU]	D94
KF268206.1	HAdV-D95/DEU/HEIM_00100/1984 [P95H9F15/1984/DEU]	D95

Accession number	Strain name	Serotype or genotype
KF268327.1	HAdV-D96/DEU/HEIM_00089/1988 [P23H32F62/1988/DEU]	D96
KF268320.1	HAdV-D97/DEU/HEIM_00087/1987 [P67H28F60/1987/DEU]	D97
KF268332.1	HAdV-D98/DEU/HEIM_00099/1986 [P98H46F9/1986/DEU]	D98
KF268211.1	HAdV-D99/DEU/HEIM_00098/1987 [P9H46F39/1987/DEU]	D99
KF268330.1	HAdV-D100/DEU/HEIM_00083/1986 [P100H17F30/1986/DEU]	D100
KF268324.1	HAdV-D101/DEU/HEIM_00095/1988 [P101H37F45/1988/DEU]	D101
KF268312.1	HAdV-D102/DEU/HEIM_00096/1984 [P102H38F30/1984/DEU]	D102
KF268322.1	HAdV-D103/DEU/HEIM_00091/1986 [P103H33F30/1986/DEU]	D103
MH558113.1	HAdV-C104/CHN/GD2467/2017 [P1H1F2/2017/CHN]	C104
ON393913.1	HAdV-D105/DEU/2020 [P105H59F9]	D105
ON393912.1	HAdV-B106/DEU/2020 [P11H11F35]	B106
MK174992.1	HAdV-D107/CAN/BCCDC/Vancouver/2010 [P102H107F25]	D107
OQ518326.1	HAdV-C108/USA/2C7/2009 [P1H2F2]	C108
OM830314.1	HAdV-D109/USA/592275/2018 [P22/H19/F9]	D109
OM830315.1	HAdV-D110/USA/600014/2108 [P67/H110/F9]	D110
LC652931.1	HAdV-D111/JPN/OIPH-OC01/2016 [P37H9F9]	D111
OQ679041.1	HAdV-D112/DEU/2016 [P112H112F67]	D112
MW694832.1	HAdV-D113/SWE/212/1978 [P20H42F42]	D113
OR853835.1	HAdV-B114/DEU/43593/Han/1/2023 [P7H3F3]	B114
OR044915.	HAdV-D115/CHN/S8130/2020 [P22H8F8]	D115

Accession number	Strain name	Serotype or genotype
1 OR958034.1	HAdV-D116/CHN/PUMCH-1/2023 [P33H28F71]	D116
KX384958.1	HAdV-B3/USA/T382/2002	B3
MW748668.1	HAdV-B3/CHN/WZ20150066/2015	B3
KF268128.1	HAdV-B3/USA/CL_46/1988 [P3H3F3]	B3



Supplementary Figure S1. Bootscanning and Simplot analyses of the whole genome sequences of the strain CHN/BCH948778/2021 by the Simplot software. The bootstrap value is a 1,000 bp for a window with a 200 bp step.