

Fig. 1

MEVFLVLLPLVSSQC~~VNLT~~TRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSN
 VTWFHAIHVS~~GTNG~~TKRFDNPVLPFNDGVYFASTEKSNIRGWIFGTTLD~~SKTQ~~SLLVNN
 ATNVV~~IKV~~CEFCNDPFLGVY~~YHK~~NNKSWMESEFRVYSSANNC~~TFEY~~VSQPFLMDLEG
 KQGNFKNLREFVFKNIDGYFKIY~~SKHT~~PNLVRDL~~PQGF~~SALEPLVDLPIGINITRFQ~~TLL~~AL
 HRSYLTPGDSSSGWTAGAAAYYVGYLQPRTFLLKYNENGTTIDA~~VDCALD~~PLSEKCTLK
 SFTVEKGIYQTSNFRVQPTESIVRFPNITNLC~~PFGE~~VFNATRFASVYAWNRRK~~ISNC~~VADYS
 VLYNSASFSTFKCYGVSP~~TKL~~NDLCFTNVYADSFVIRGDEV~~RQI~~APGQTGKIADYNYKLP
 DDFTGCVIAWNSNNLDSKVGGN~~YNYL~~RLFRKSNLKP~~FERD~~ISTEYQAGSTPCNGVEGF
 NCYFPLQSYGFQPTNGVGYQPYRVVLSFELHAPATVCGPKKSTNLVKNKC~~VNF~~ENG
 LTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQ~~TLEILD~~ITPC~~SFGV~~SVITPGTNTSNQ
 VAVLYQDVNCTEVPVAIHADQLIPTWRVYSTGSNVFQTRAGCLIGAEHVNN~~SYEC~~DIPIG
 AGICASYQTQ~~TNSP~~**RRARS**VASQSIIAYTMSLGAENSVAYSNNSIAIPTNFTISVTTEILPVS
 MTKTSVDCTMYICGDSTECSNLLLQYGSFCTQLNRALTGIAVEQDKNTQEVFAQVKQIYK
 TPIKDFGGFNFSOILPDPSPKPSKRSFIEDLLENKVT~~LAD~~AGFIKQYGDCLGDIAARDLICA
 QKFNGLT~~VLP~~LLTDEMIAQYTSALLAGTITSGWTFGAGAAALQIPFAMQMAYR~~FNG~~GIGVT
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 ISSVLNDILSRLDKVEAEVQIDRLITGR~~LQSL~~QTYVTQQLIRAAEIRASANLAATKMSECV
 LGQSKRVDFCGKG~~YHLM~~SFPQSA~~PHGV~~VFLHVTVYPAQEKNFTTAPAICH~~DGKA~~HFPRE
 GVFVSN~~GTHW~~FVTQRNFYEPQIITDNTFVSGNCDVVIGIVNNTVYDPLQPELDSFKEEL
 DKYFKNHTSPVDLGDISGINASV~~VNIQ~~EIDRLNEVAKNLNESLIDLQELGKYEYIKWP
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SEQ ID NO: 1

Fig. 2

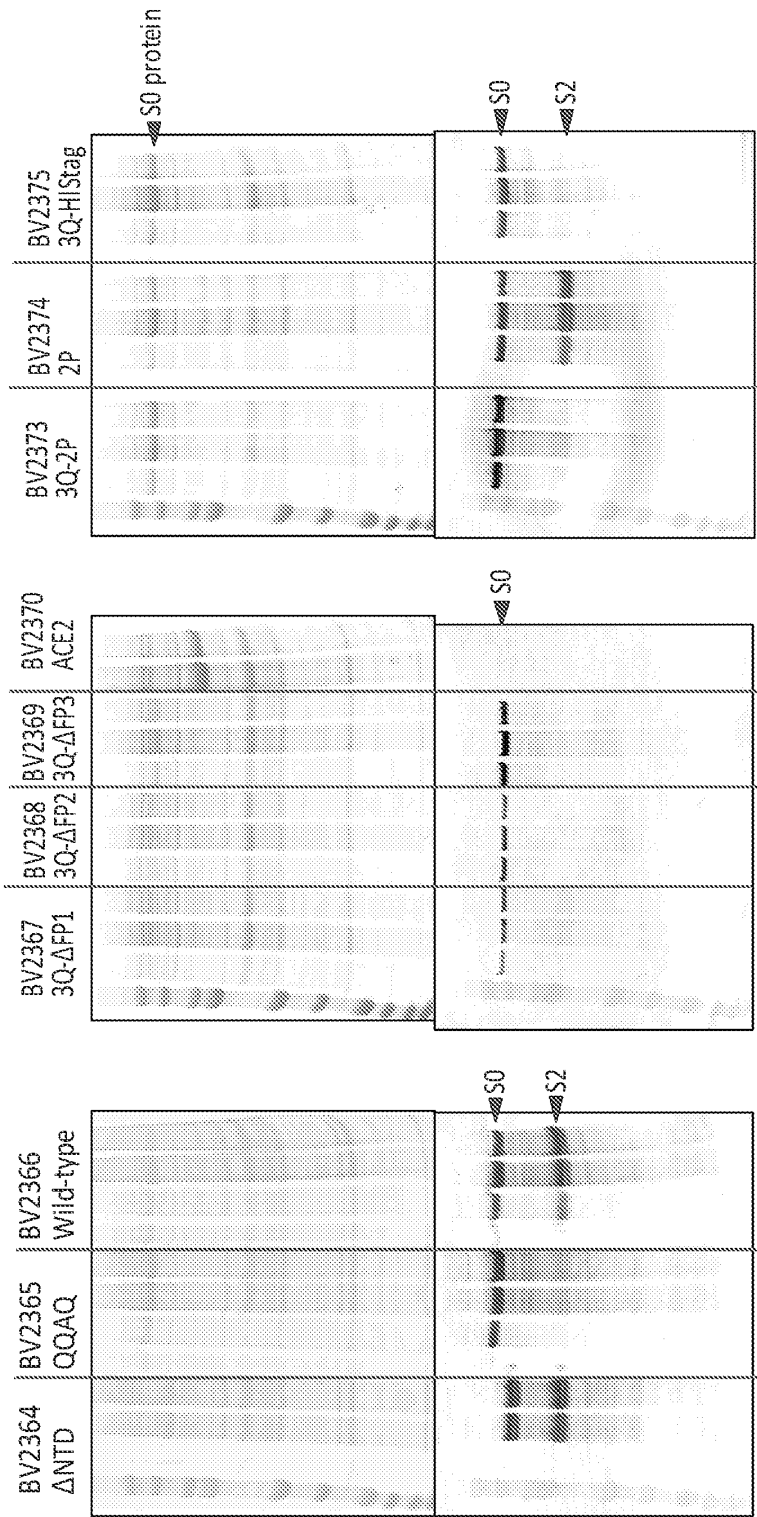


Fig. 3

BV2373

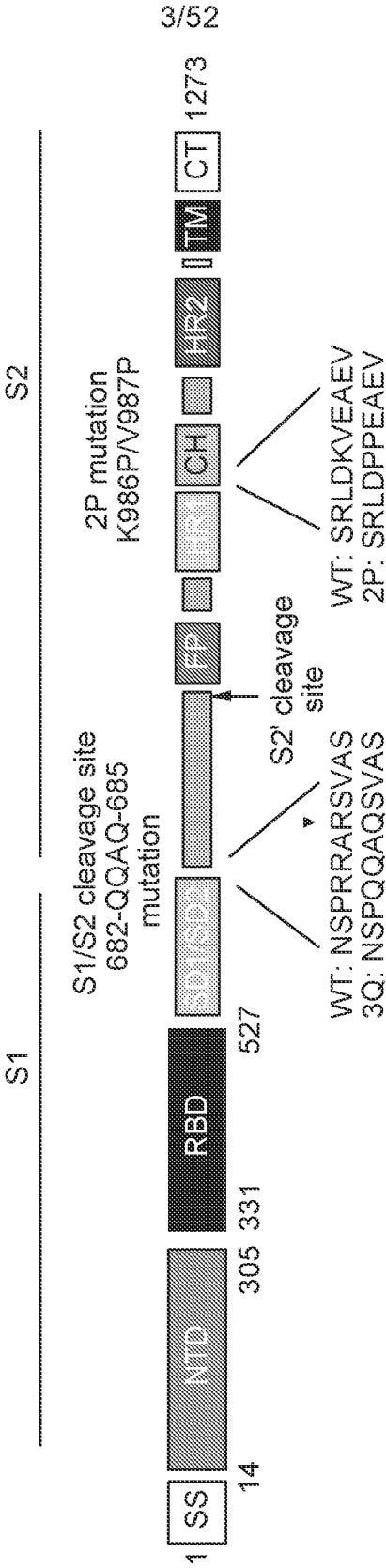


Fig. 4

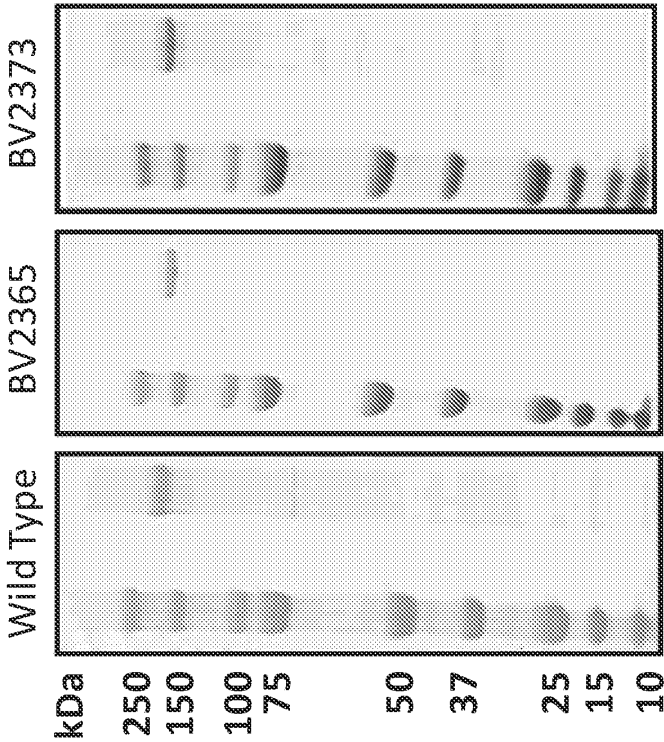


Fig. 5

BV2373 (SEQ ID NO: 86)

Inactive furin
cleavage site

CoV-2019/QQAA/K986P/V987P

Signal
peptide

MEFVLVLLPLVSSQC
VNLTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTWFHAIHVS
GTNGTKREFDNPVLPENDGVYFASTEKSNIRGWIFGTTLDSTQSLLLIVNNATNV
VIKVCFEFCNDPFLGVYHKNNKSMMESEFRVYSSANNCTFEYVSQPF
LMDLEGKQGNFKNLFVFNKIDGYFKIYSKHTPINLVRDL
PQGFSALEPLVDLPIGINITRFQTLALHRSYLT
PGDSSGWTAGAAA
YVGYLQPRTFLLKYNENGTITDAV
DCALDPLSETKCTLKSFTEKGIYQTSNFRVQPTESIVRFPNITNLC
PFEVFNATRFASVYAWNRRKISNCVADYSVLYNSASFTEKCYGVSPTK
LNDLCFTNVYADSFVIRGDEVROIAPGQTGKIADYNYKLPDDFTGCVIAWNS
NNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIIYQAGSTPCNGVEGFNCYF
PPLQSYGFQPTNGVGYPYRVVVLSEFLLHAPATVCGPKKSTNLVKNKCVN
FNENGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPC
SFGGVSUITPGTNTSNQAVLYQDVNCTEVPVAIHADQLTPTWRVYSTG
SNVVFQTRAGCLIGAEHVNNSYECDIPIGAGICASYQTQNSPQQAAQ
SSVASQSI
IAYTMSLGAENSVAYSNNNSIAIPTNFTISVTTEILPVSMTKTSVDCTMYICGDS
TECSNLLLLQYGSFCTQLNRALTGIAVEQDKNTQEVFAQVKQIYKTPPIKDFGGFNFS
QILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDCLGDI
AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAA
LQIPFAMQMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQDSLSSTASALGKLQ
DVVNQNAQALNTLVKQLSSNEGAISSV
LNDILSRDLPEPEAEVQIDRLITGR
LQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYHLM
SFPQSA
PHGVVFLHVTVVPAQEKNTTAPAI
CHDGAHFPREGVFSNGTHWEVTVQRNFYEPQIITDNTFVSGNCDVIGIVNNTVYDPLQPELDS
FKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKN
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LKGVKLHYT

Fig. 6A

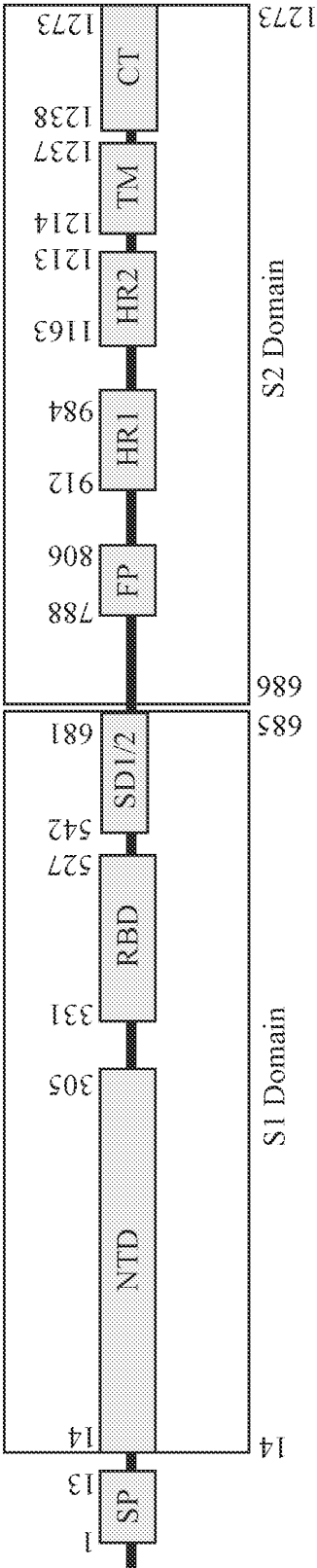
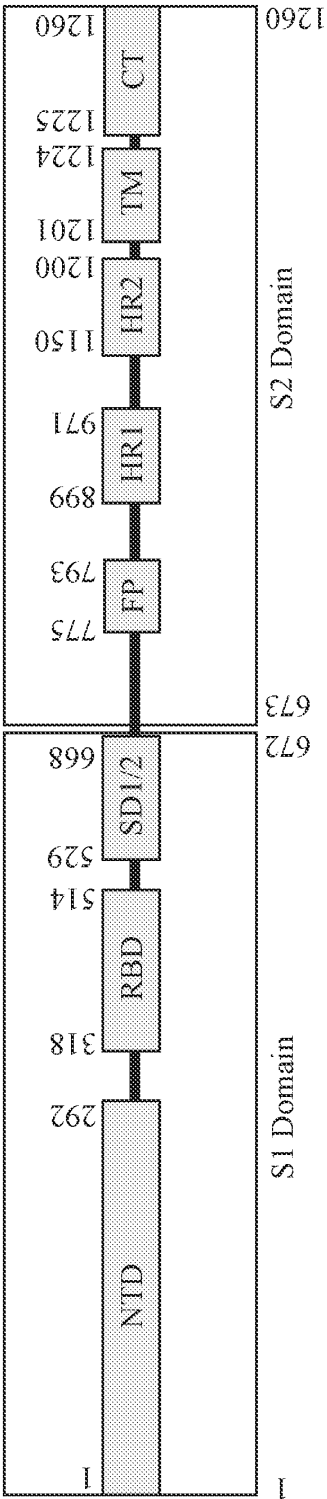


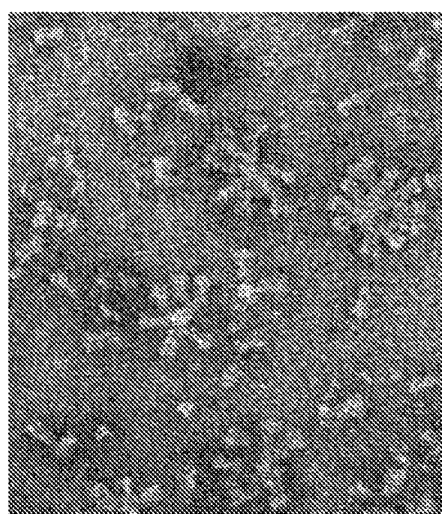
Fig. 6B



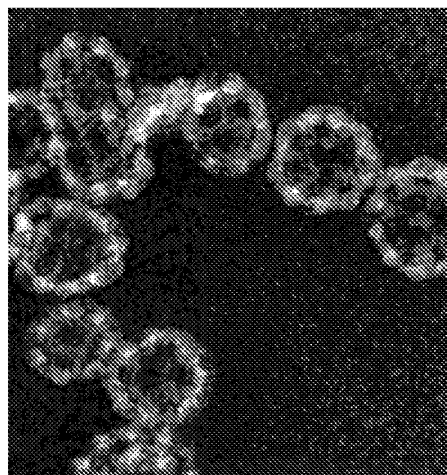
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Fig. 7

HA nanoparticles
(detergent core)



saponin adjuvant



HA nanoparticles
HaSMaNs (Hemagglutinin Saponin
Matrix Nanoparticles)

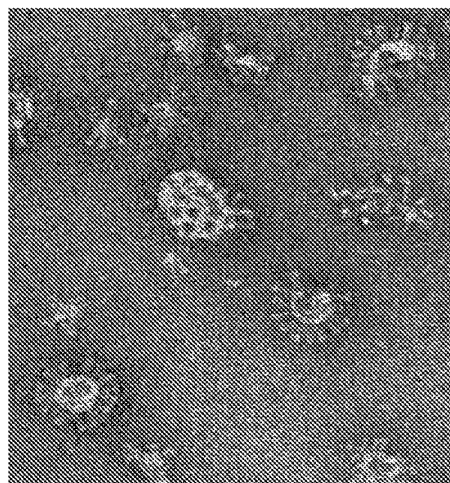
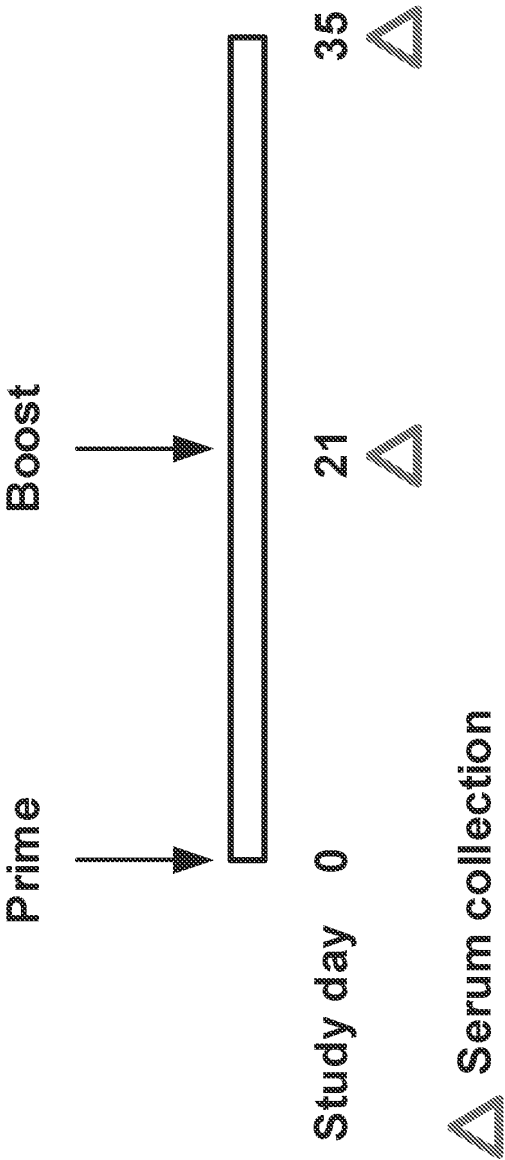
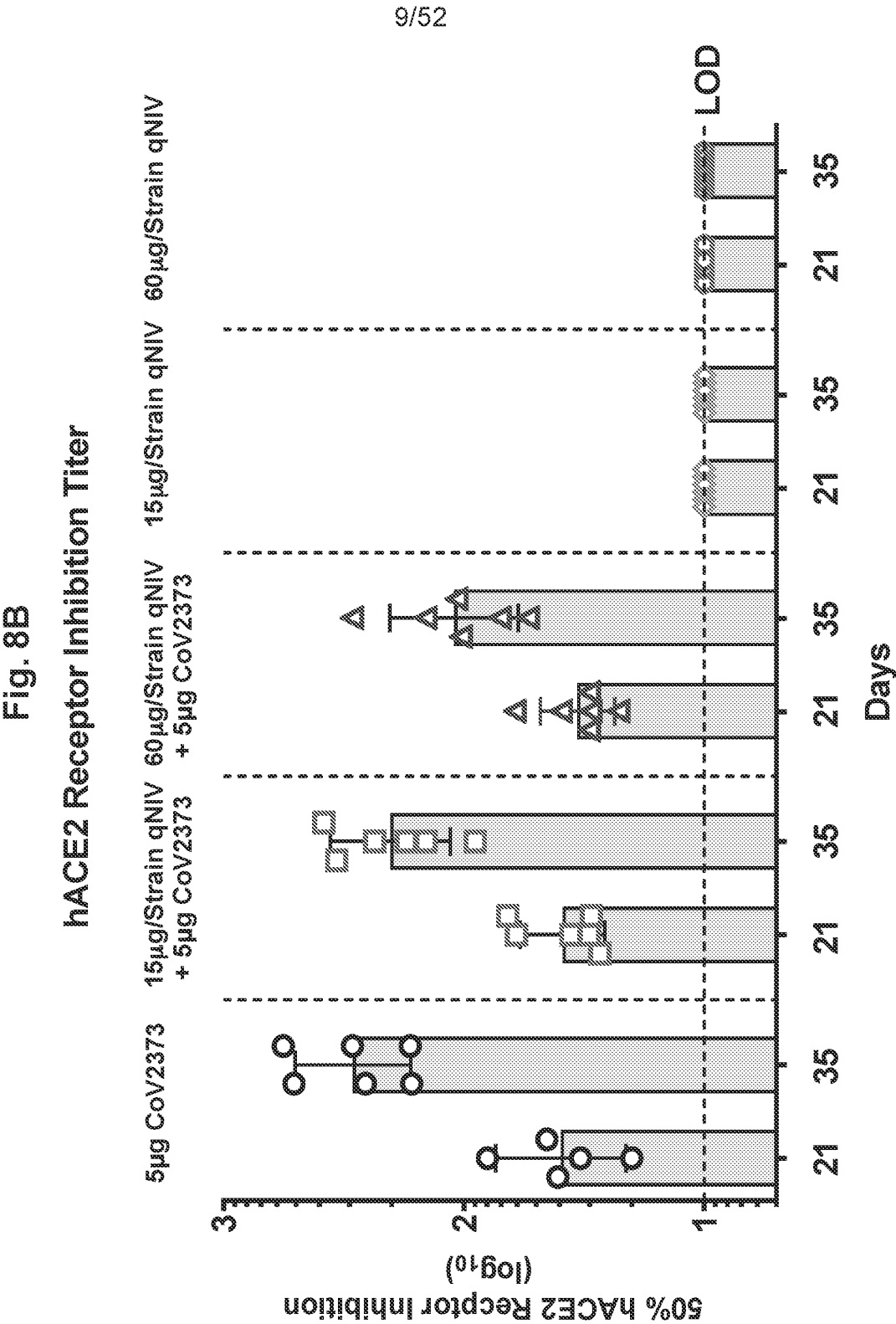
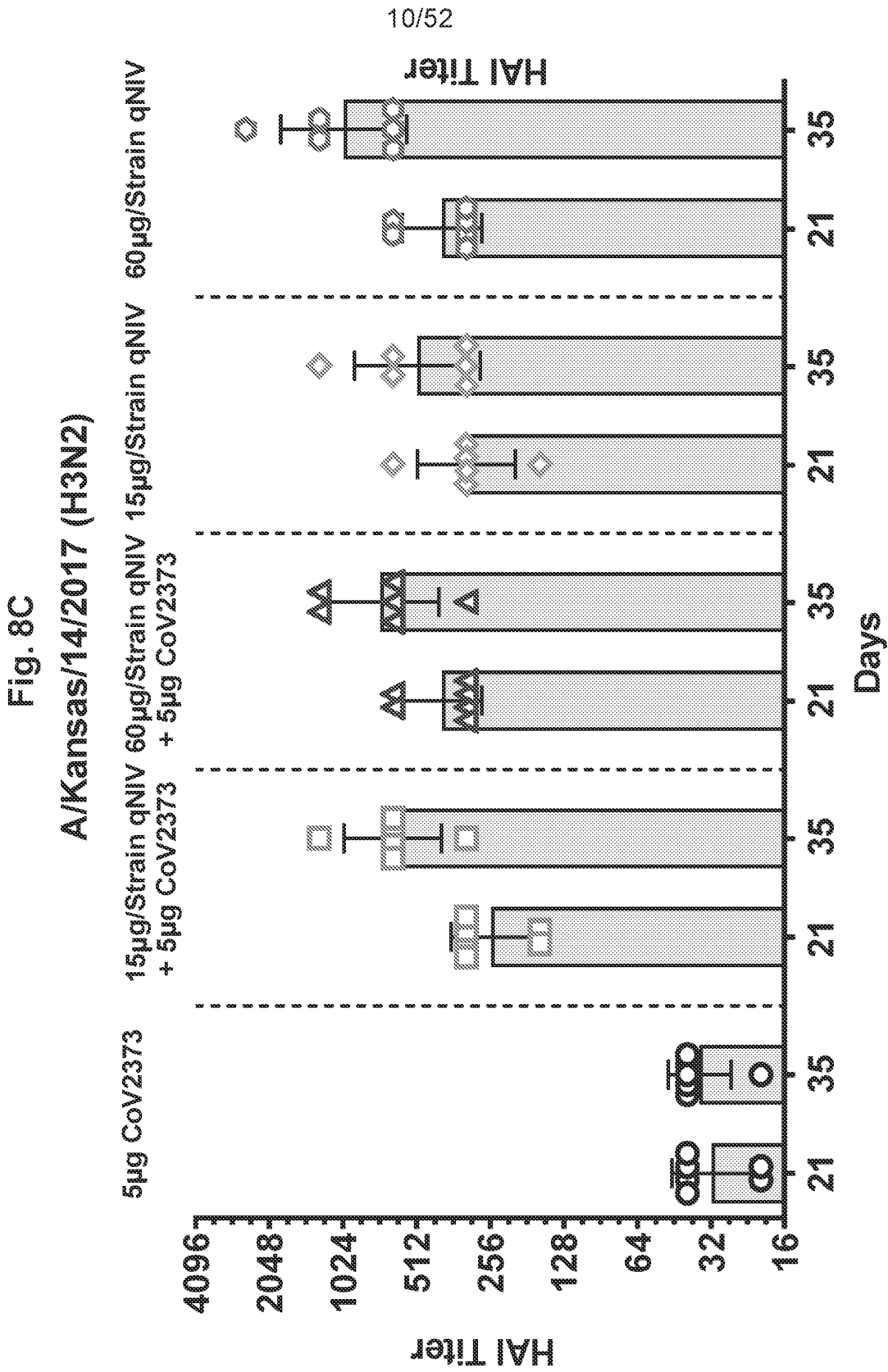
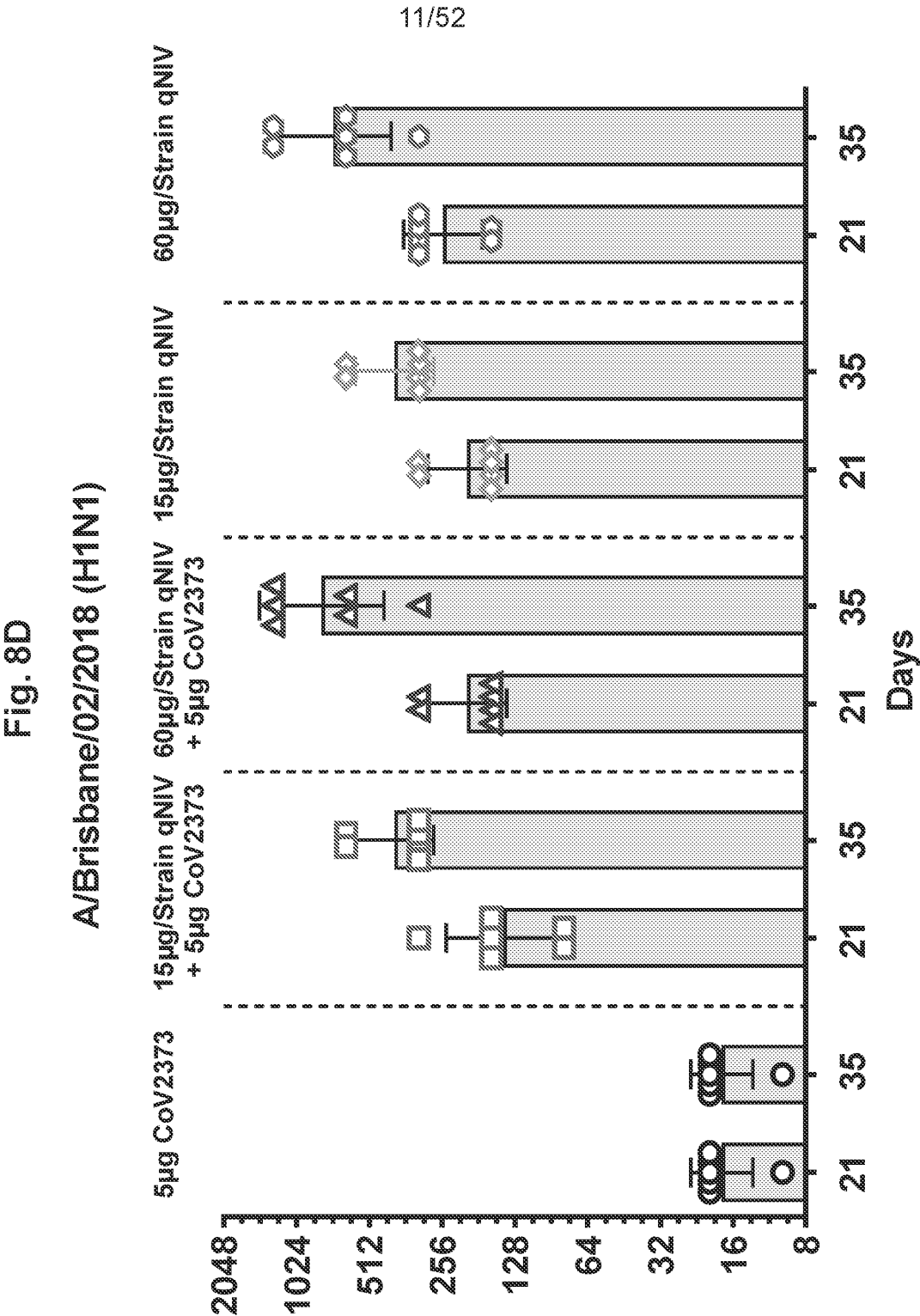


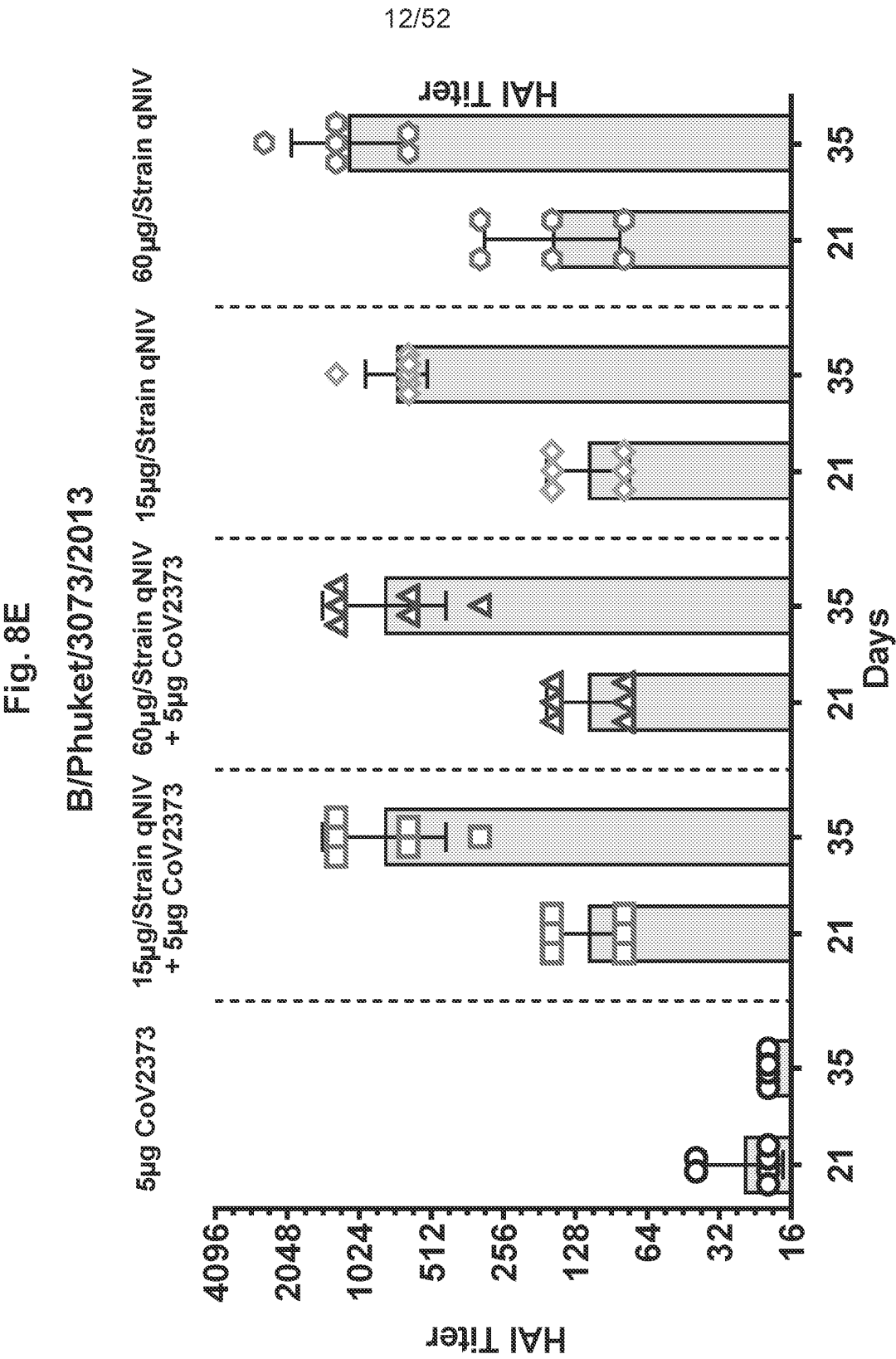
Fig. 8A











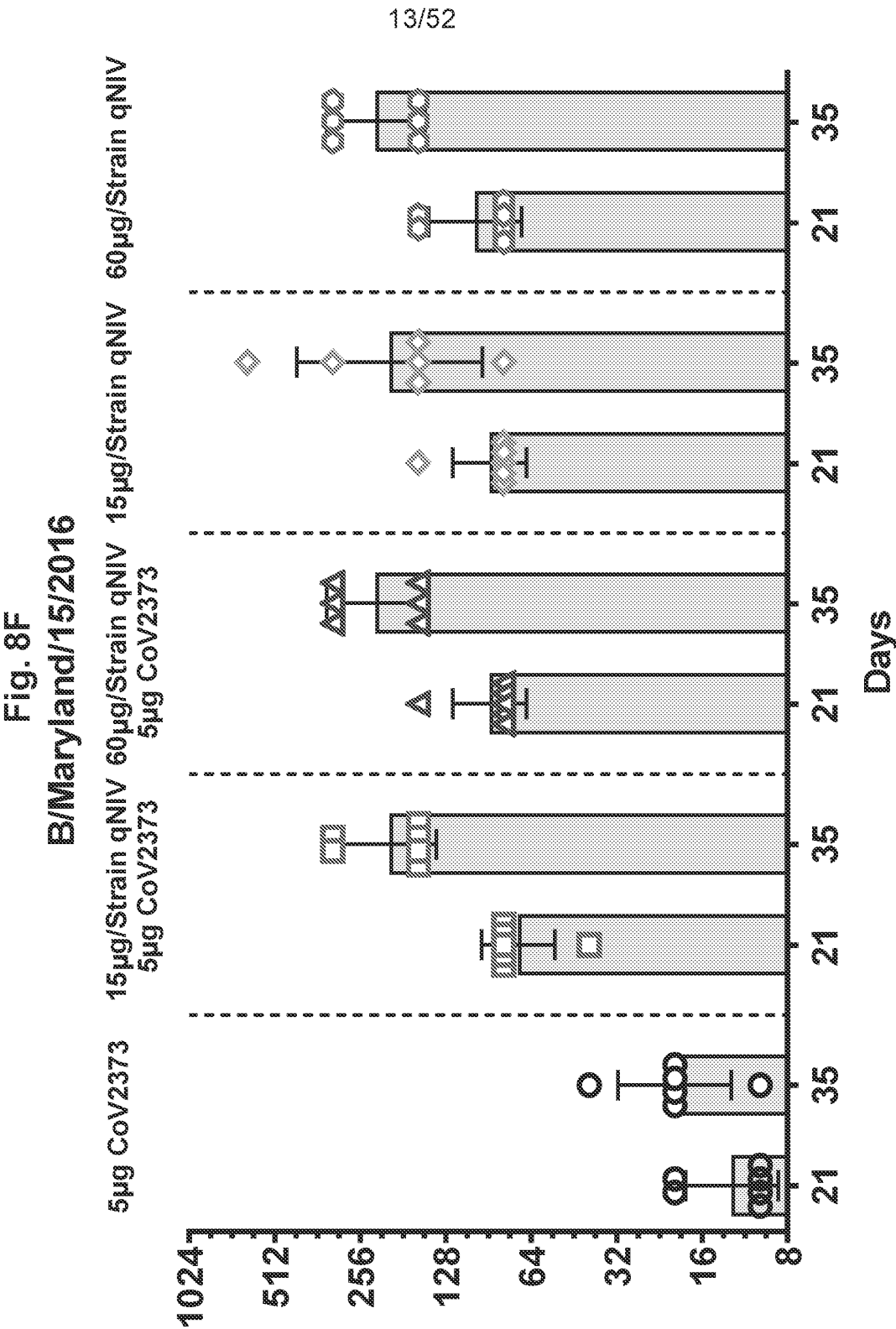


Fig. 9A

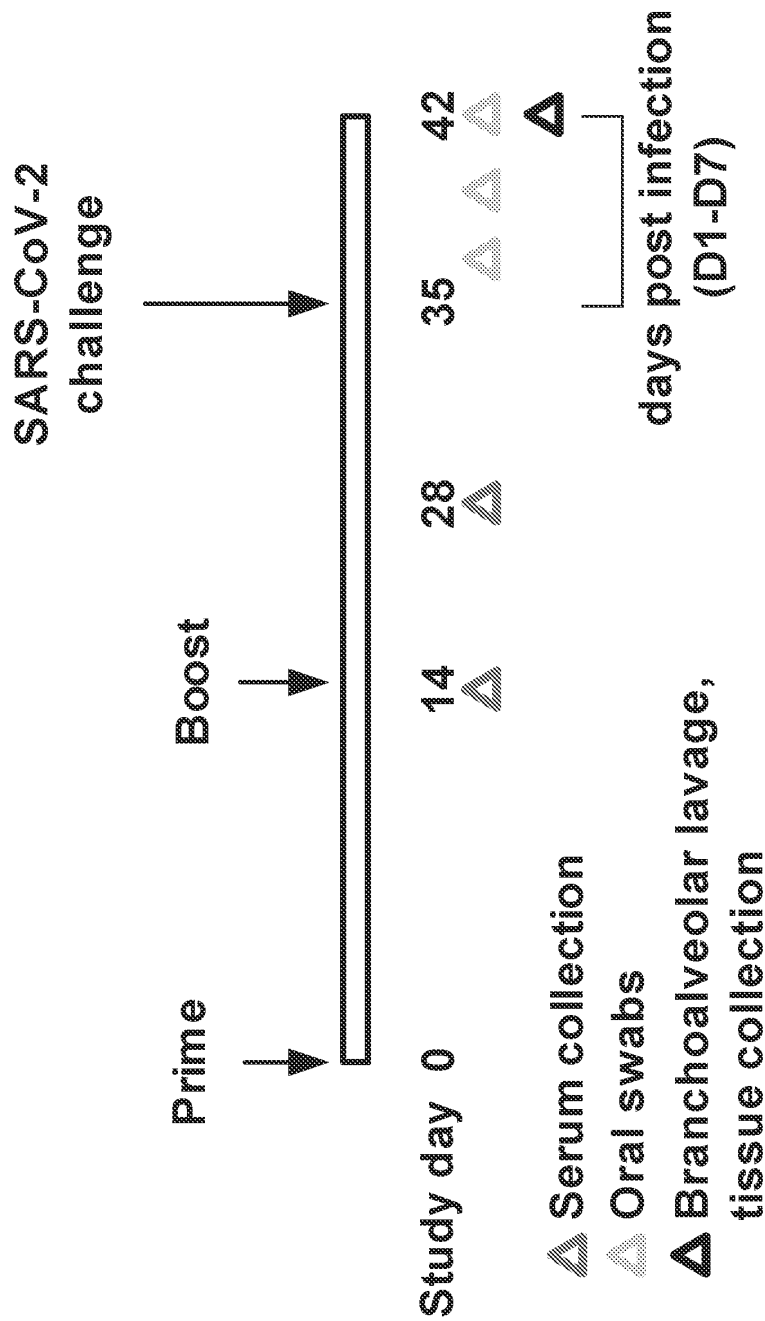
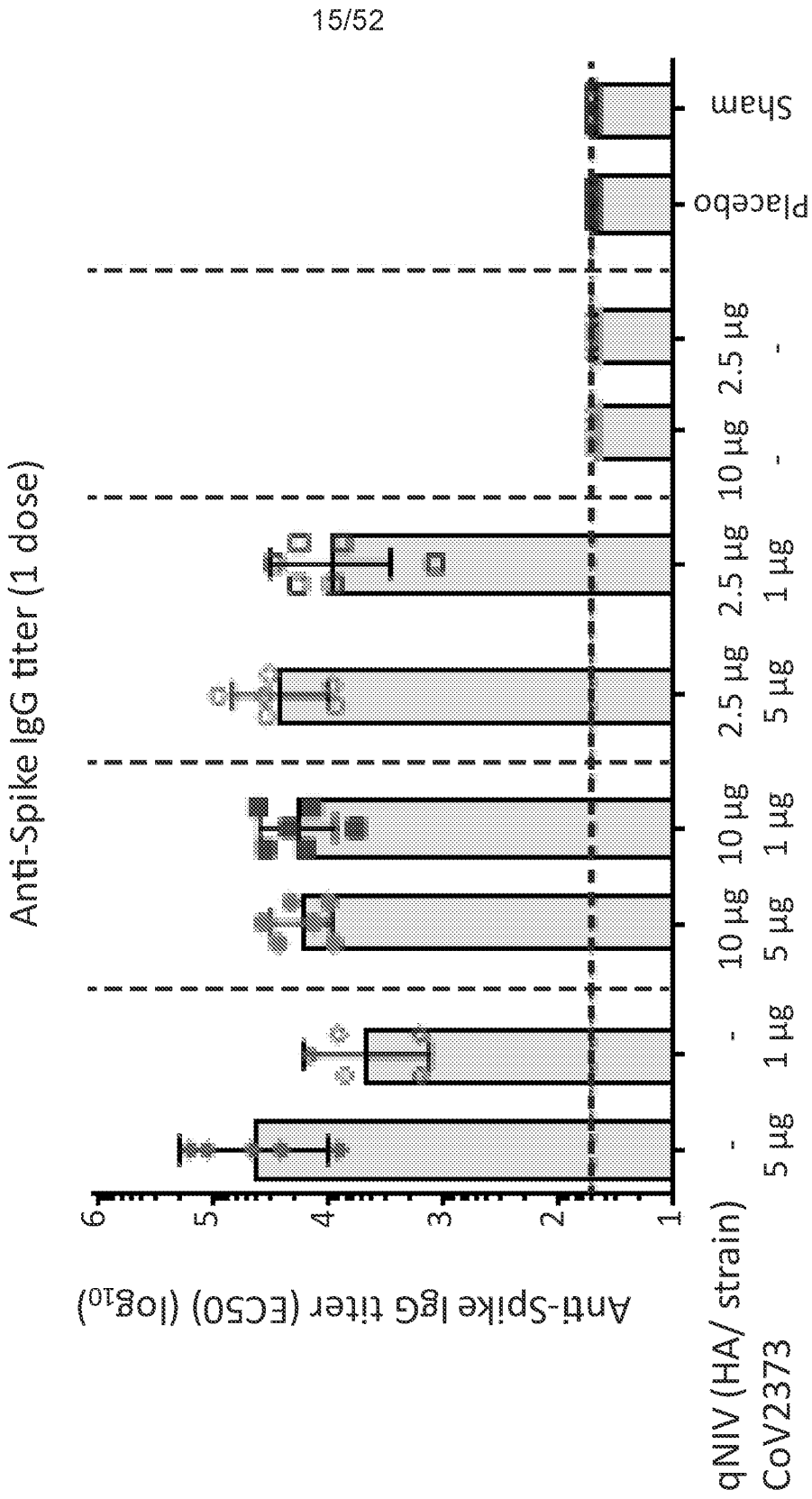
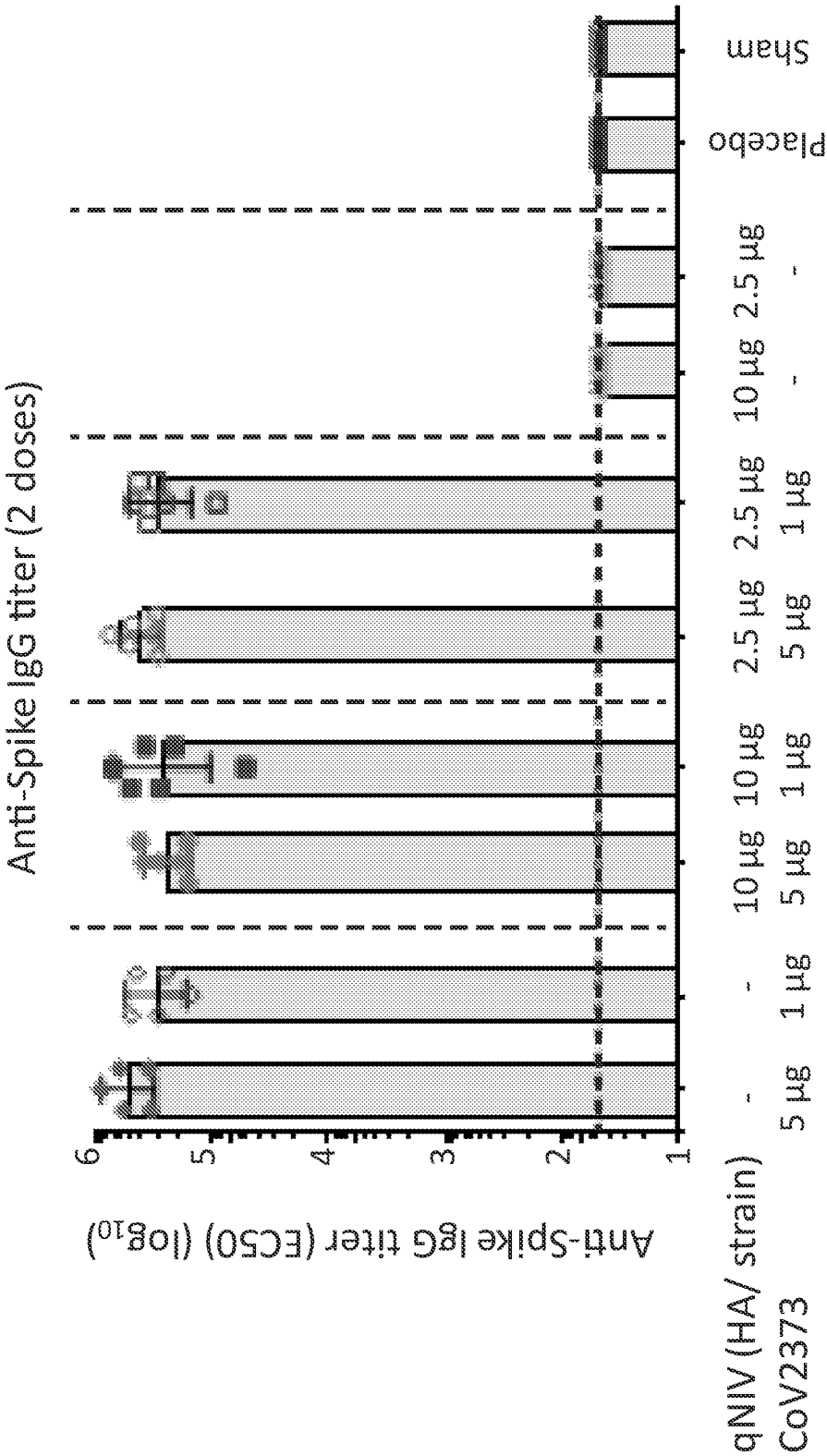


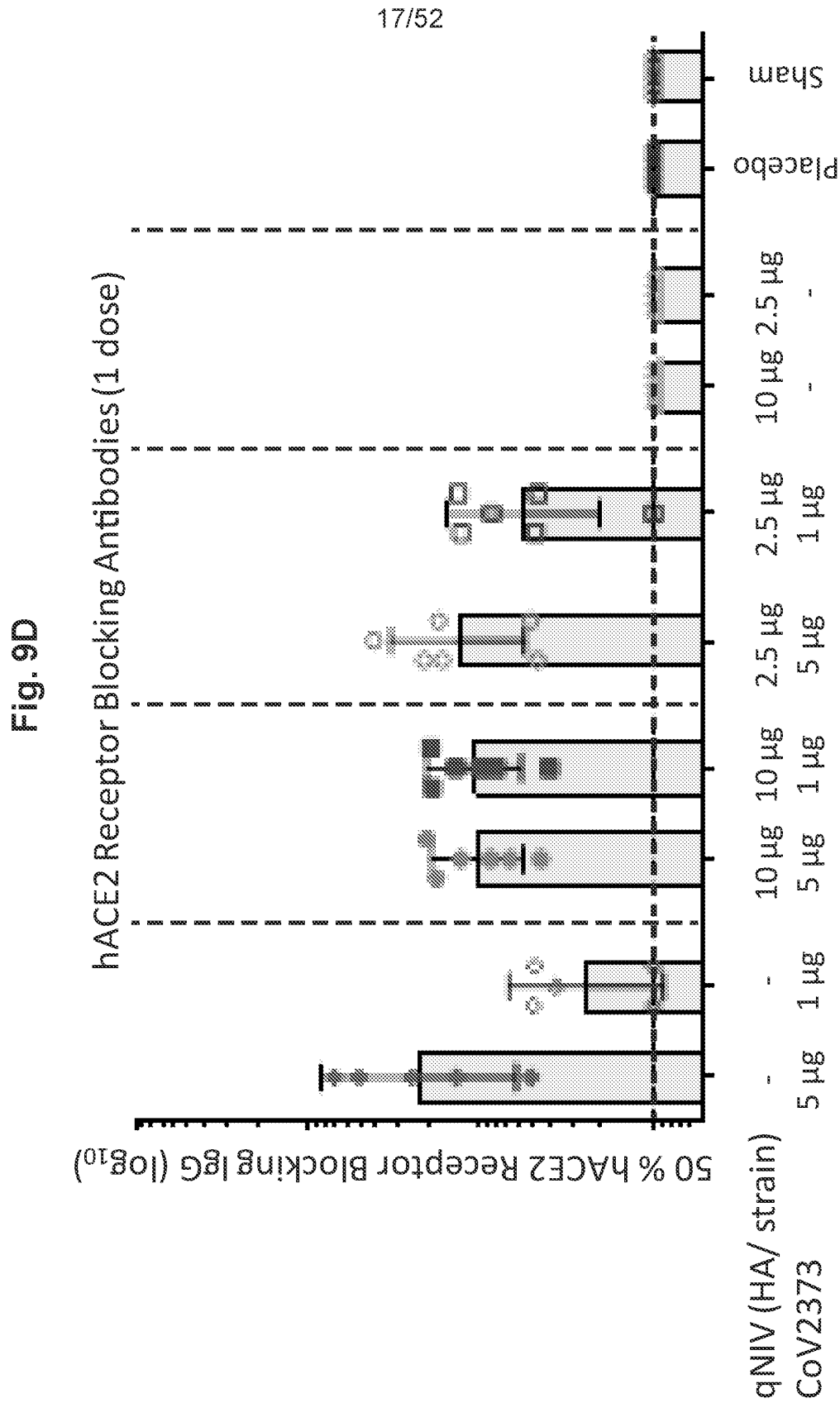
Fig. 9B

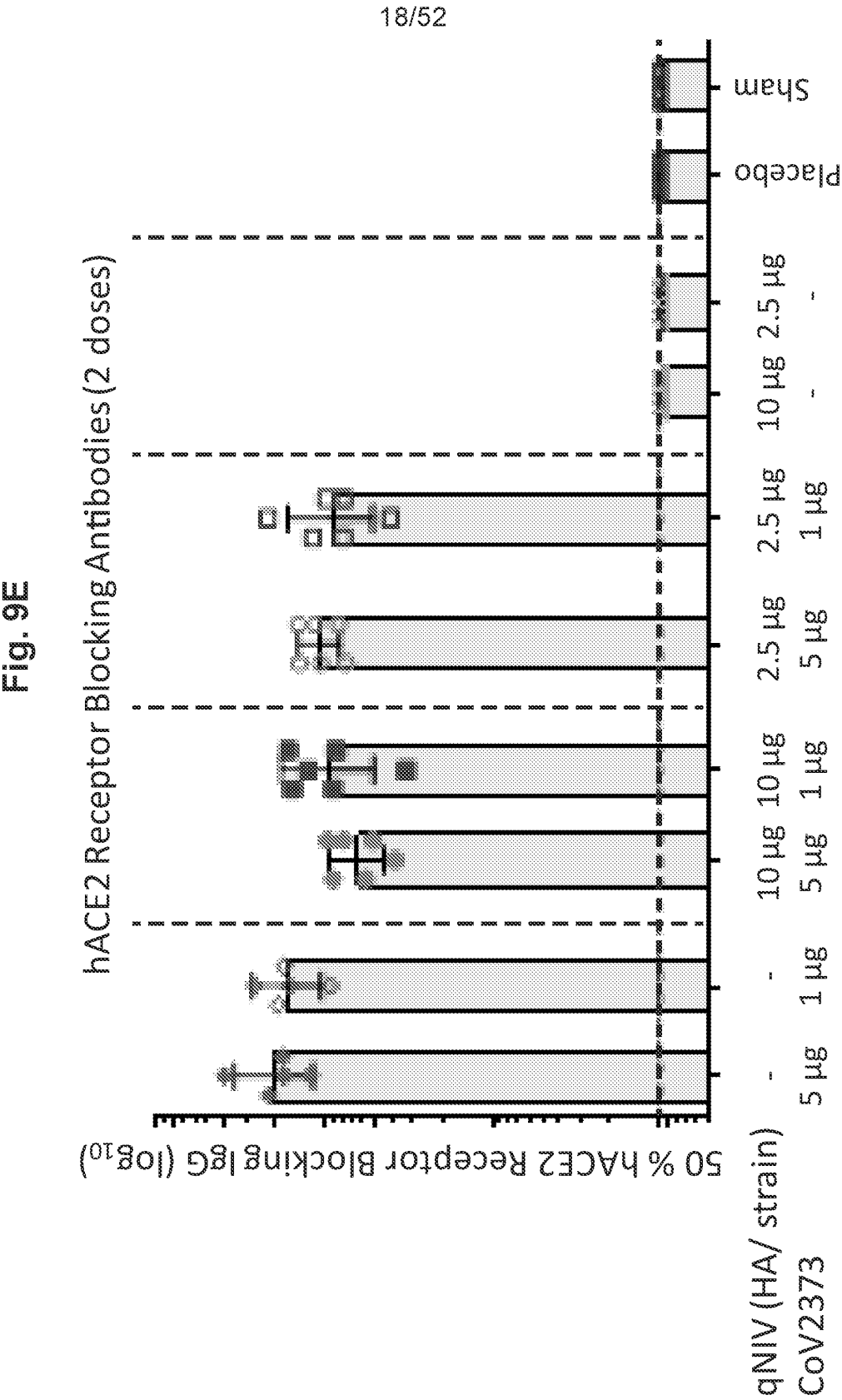


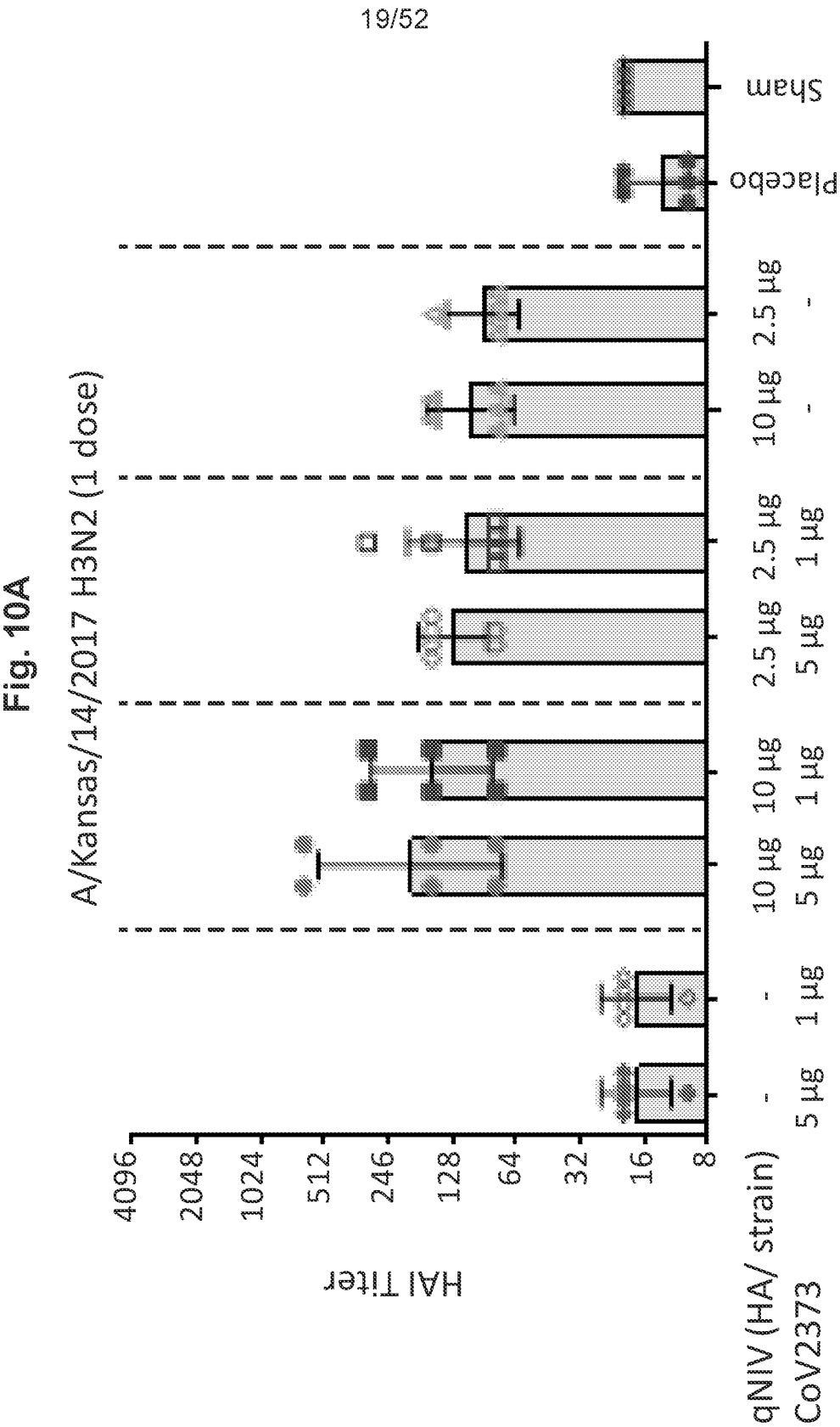
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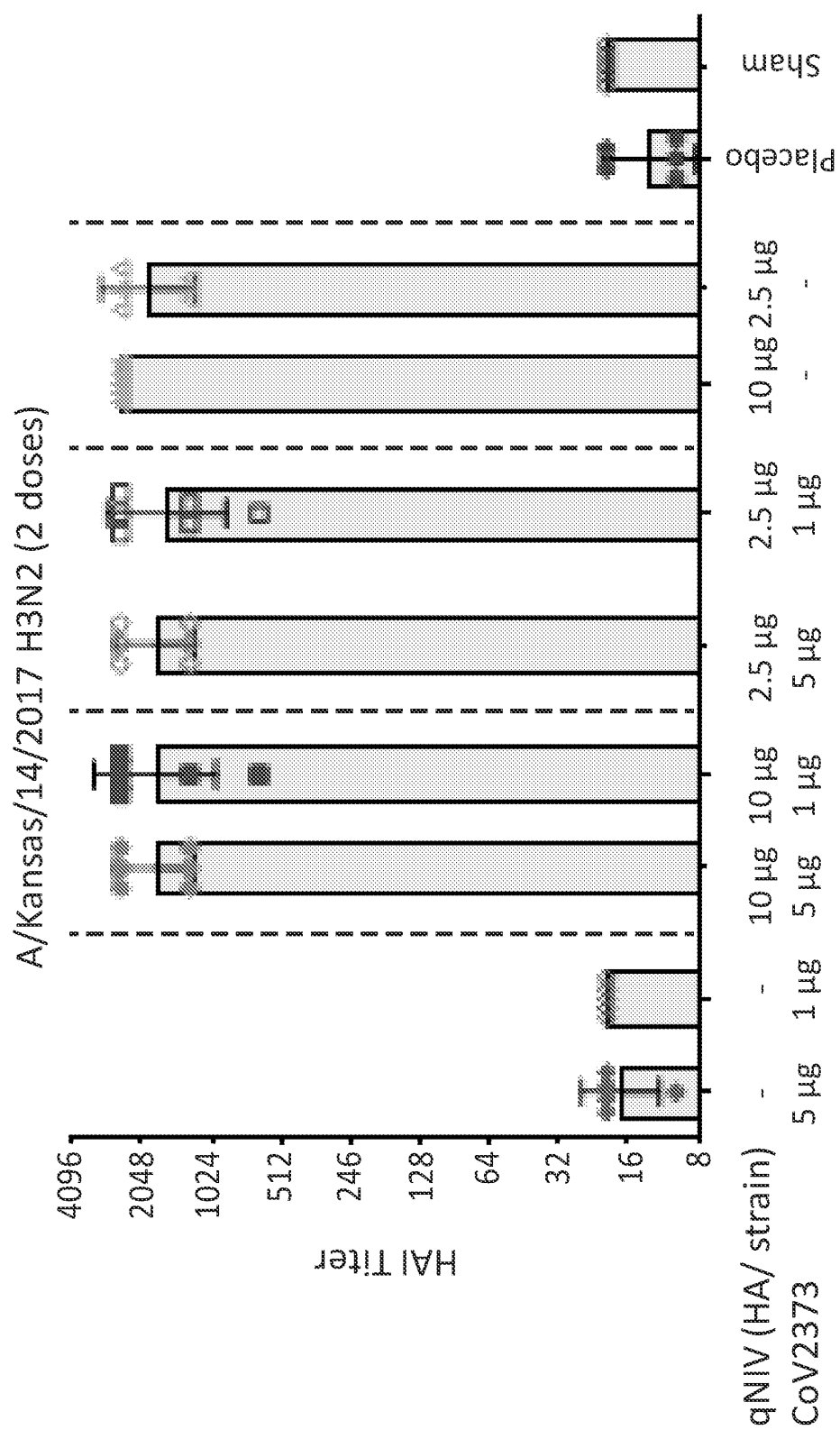
Fig. 9C











A/Brisbane/02/2018 H1N1 (1 dose)

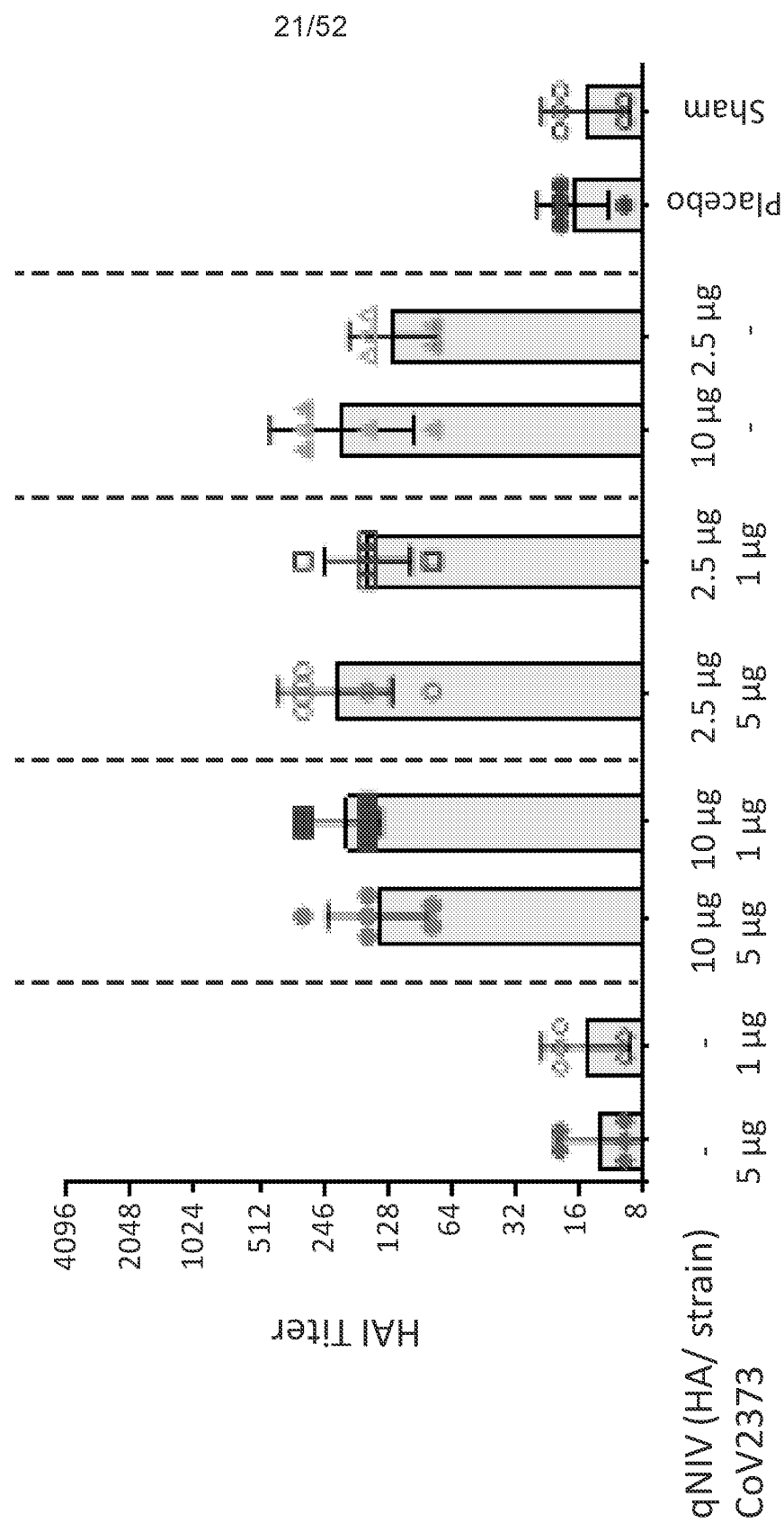
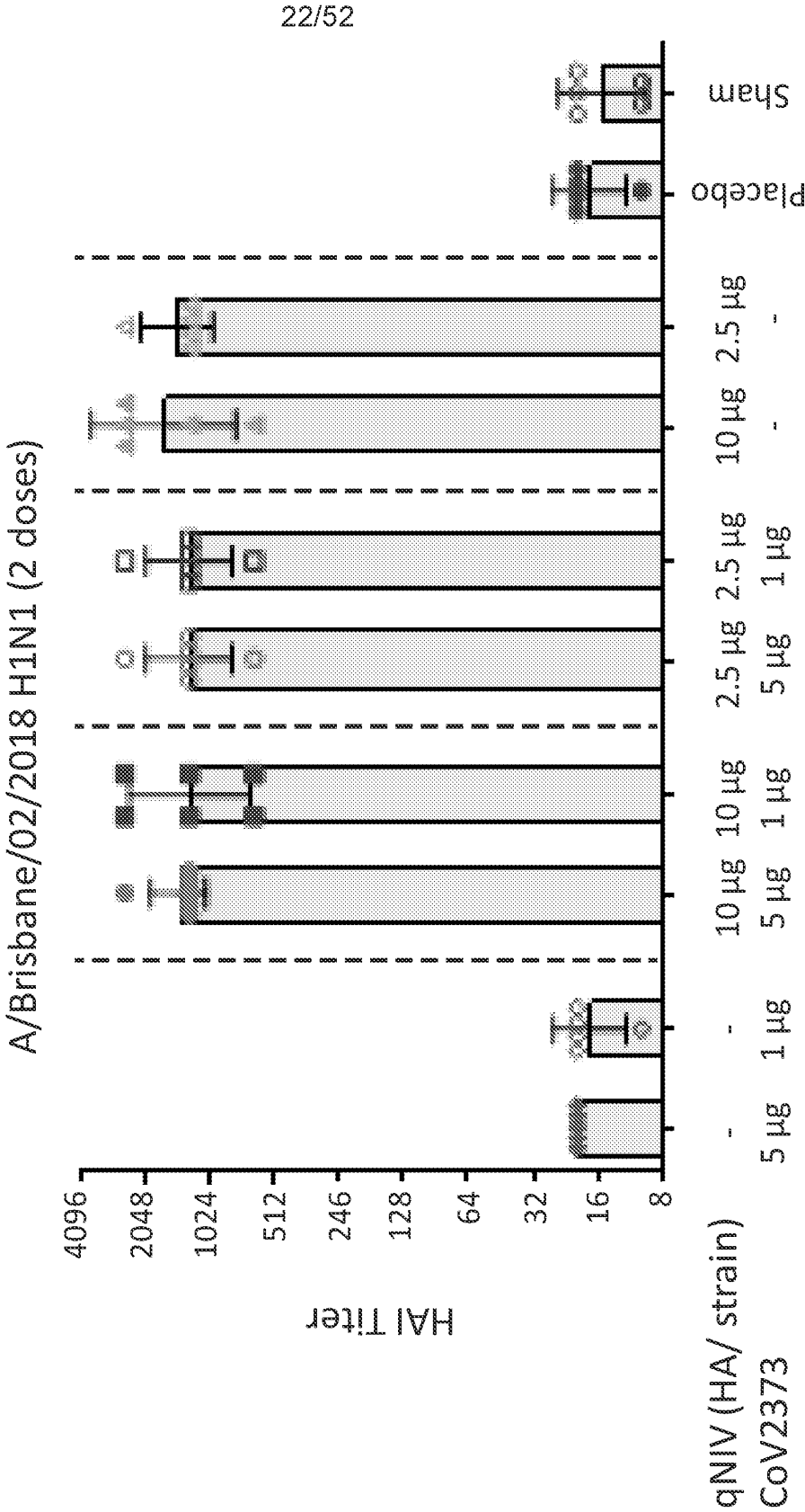


Fig. 10D



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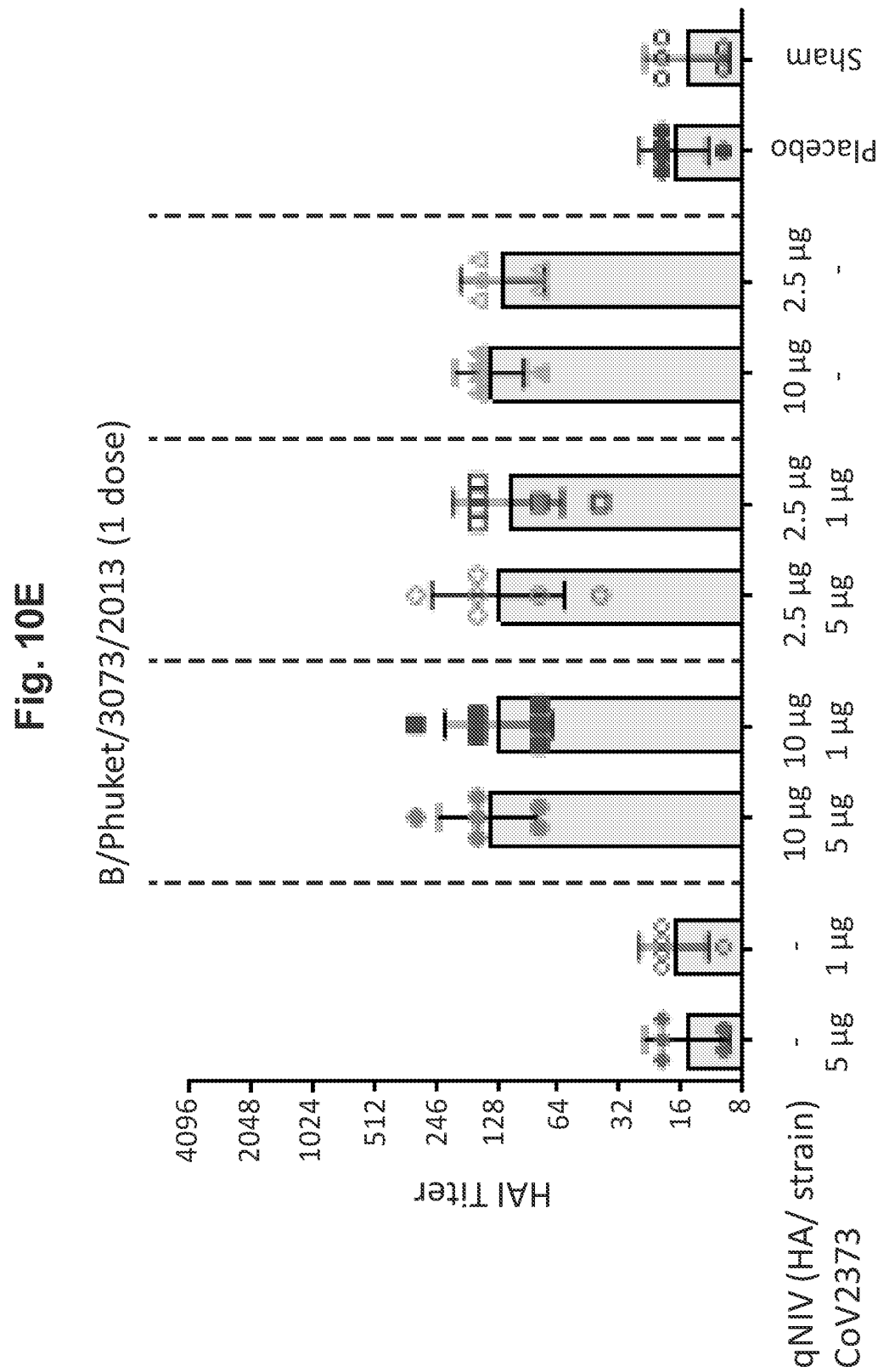


Fig. 10F

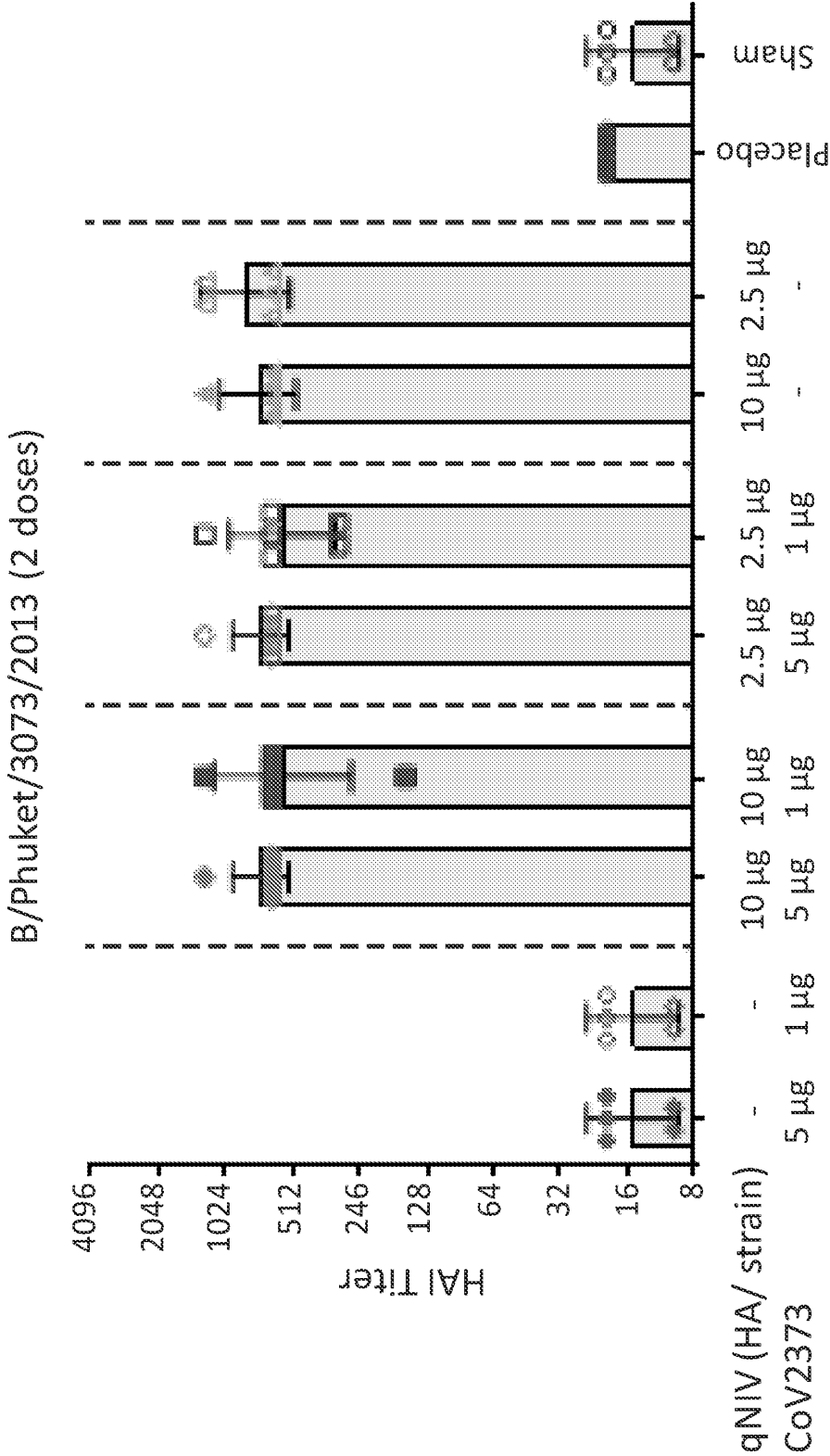
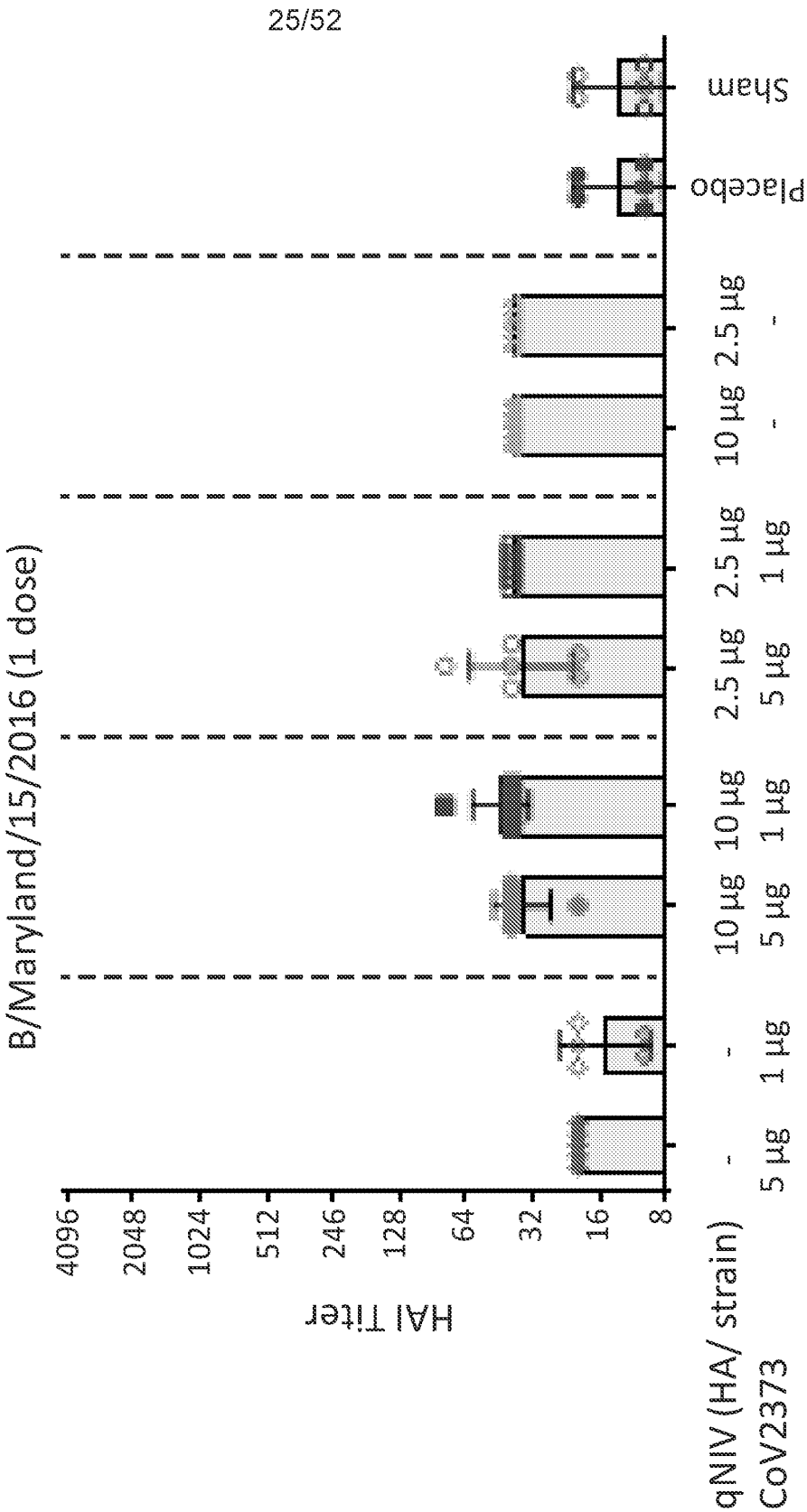


Fig. 10G



B/Maryland/15/2016 (2 doses)

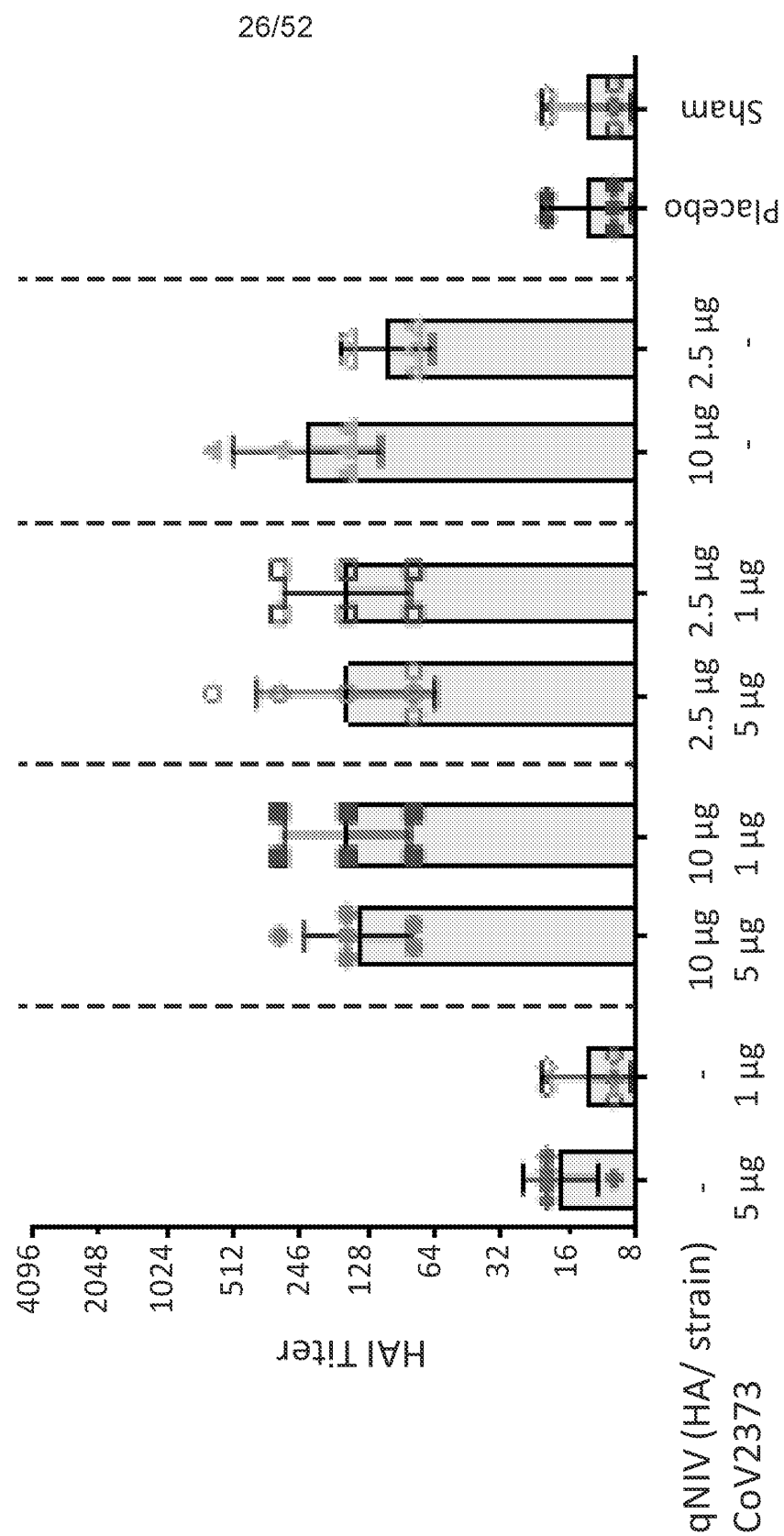
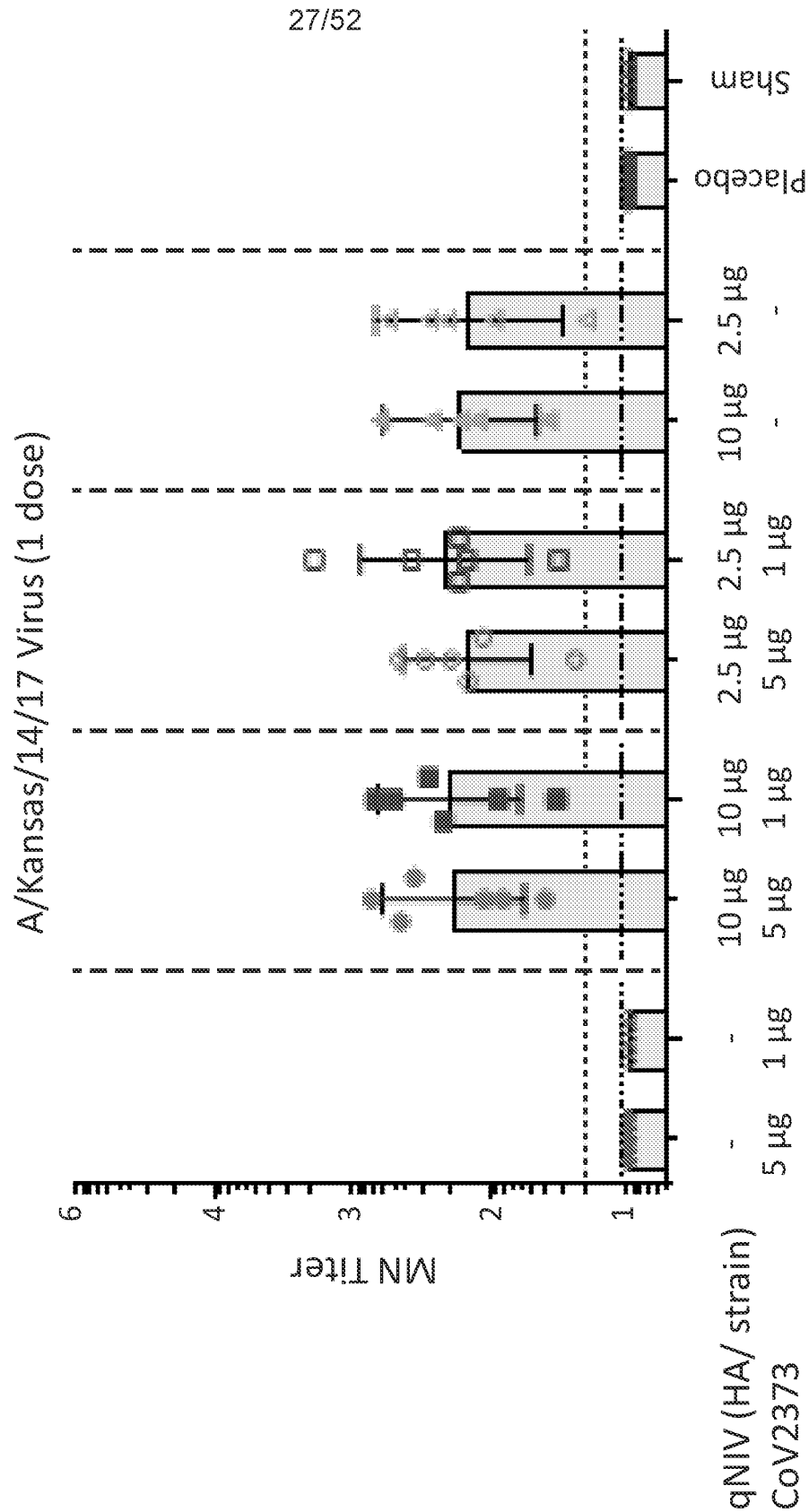


Fig. 11A



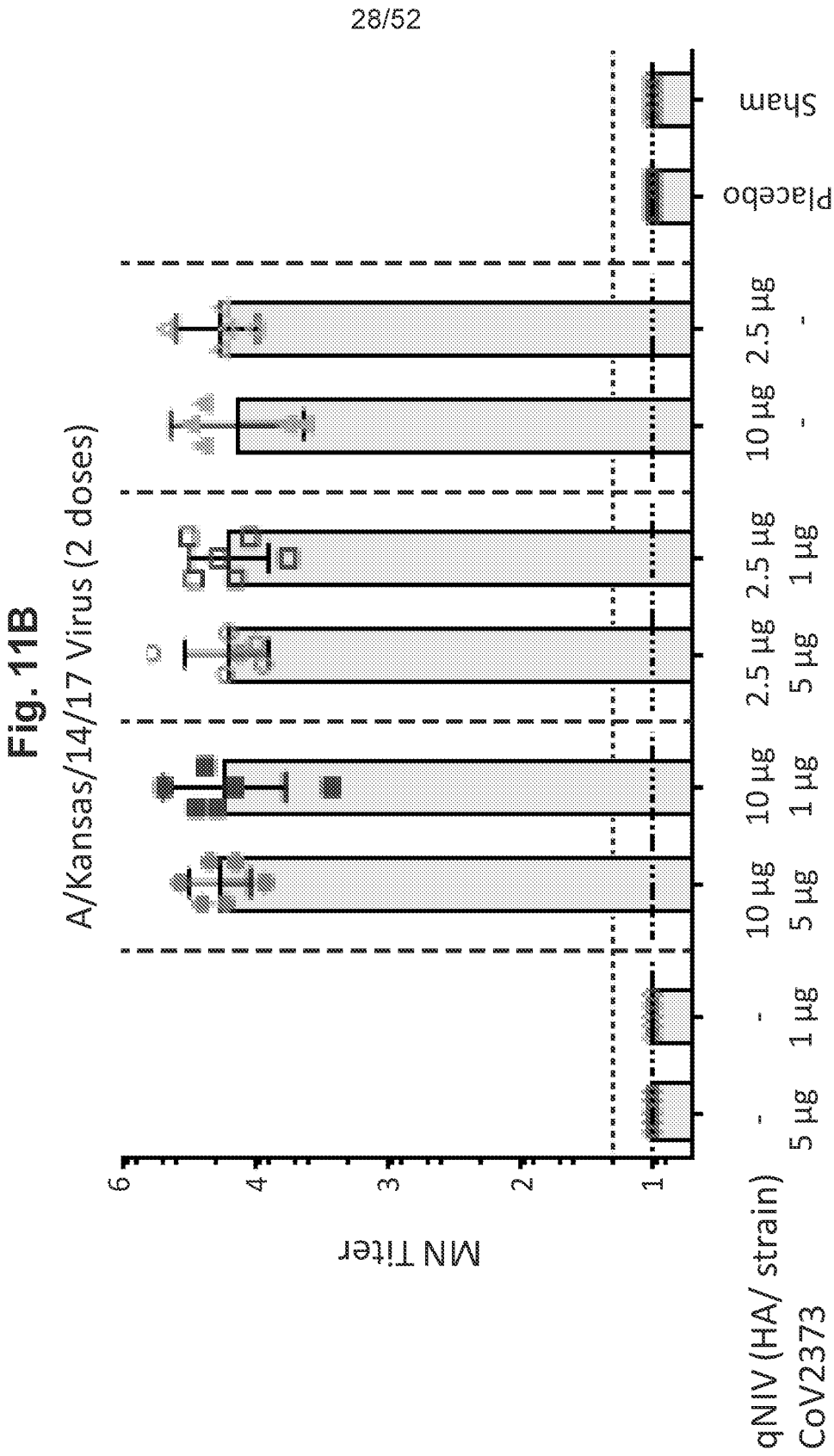
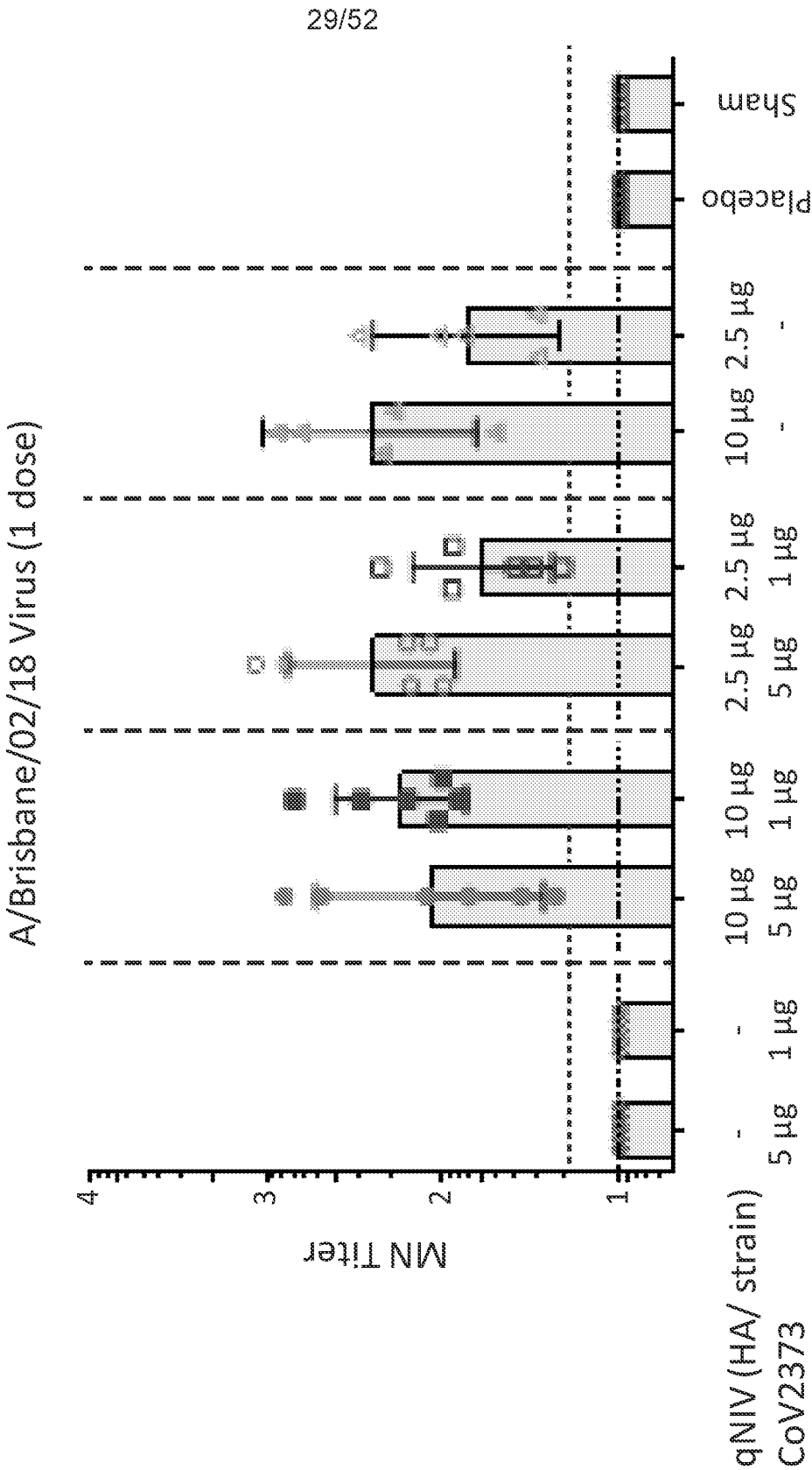
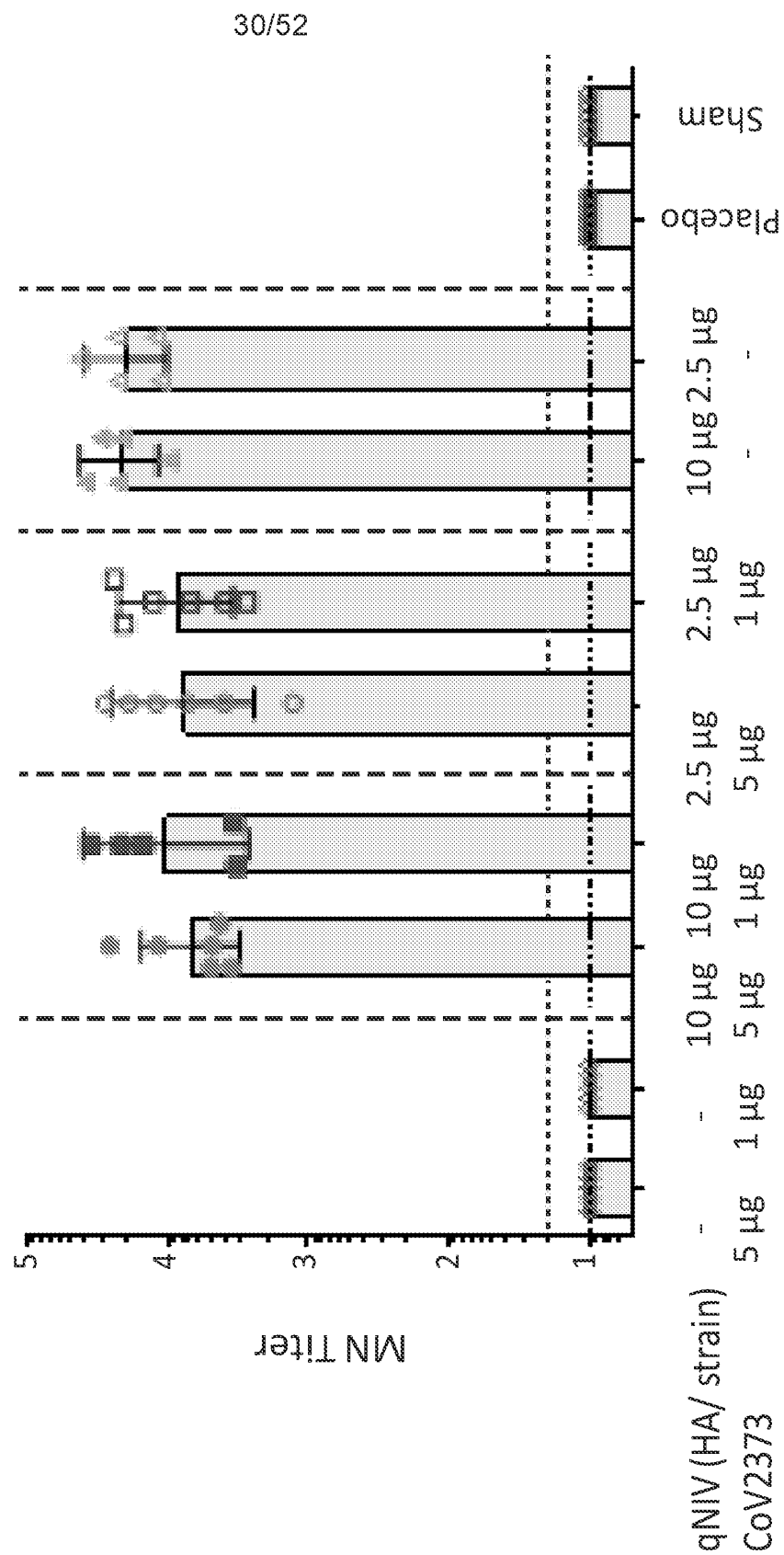


Fig. 11C



A/Brisbane/02/18 Virus (2 doses)



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Fig. 11E

B/Phuket/3073/13 Virus (1 dose)

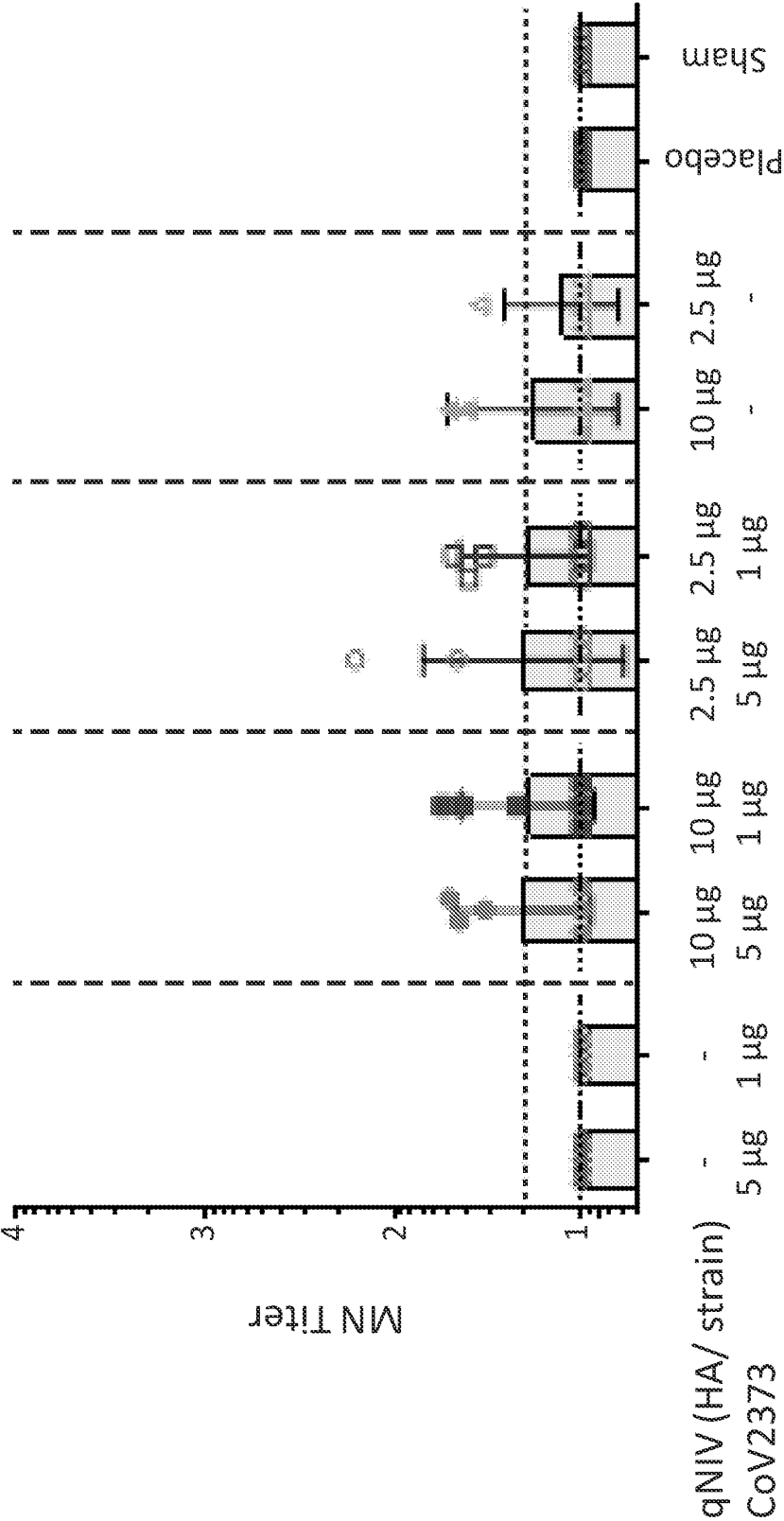
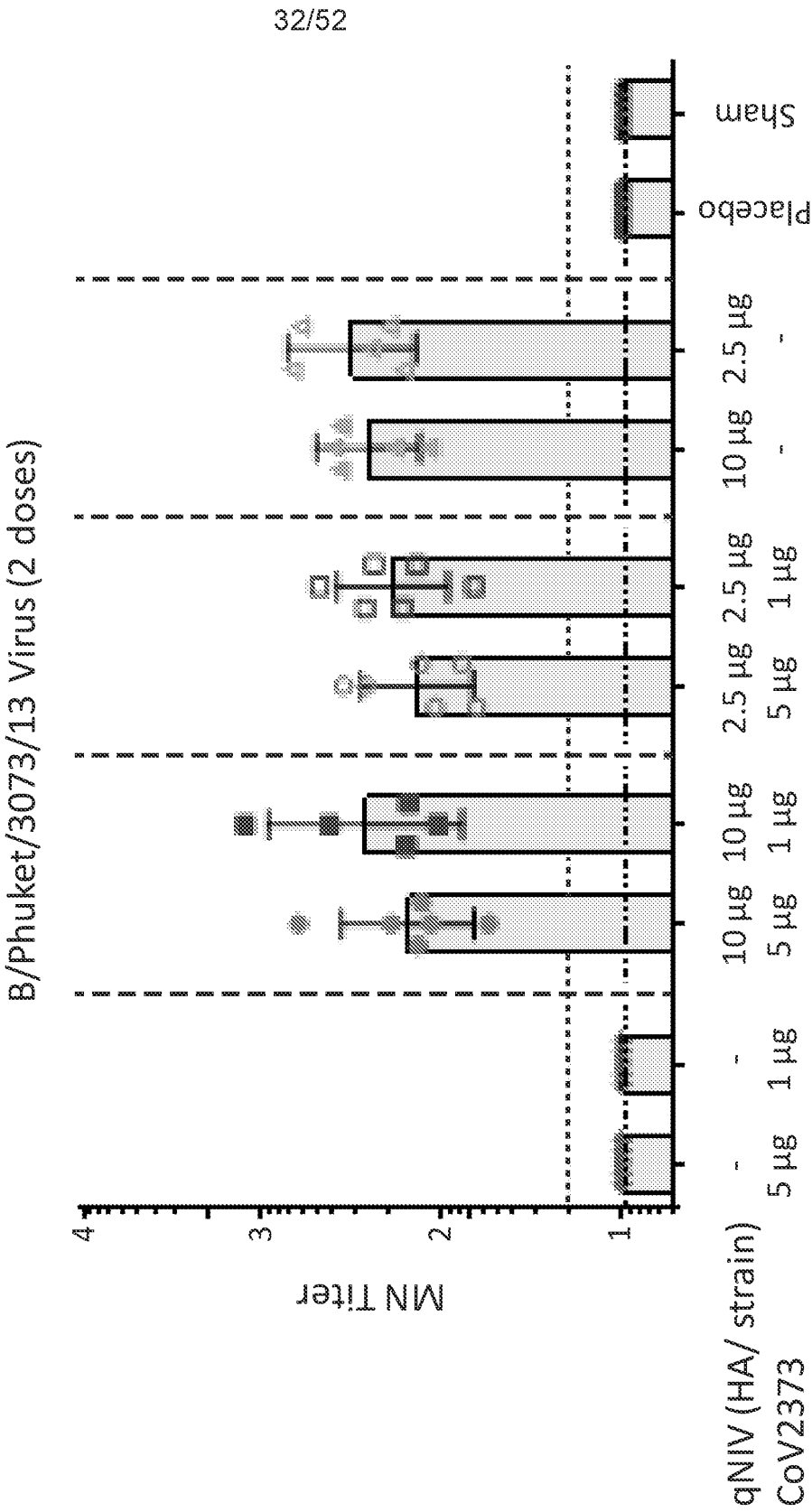
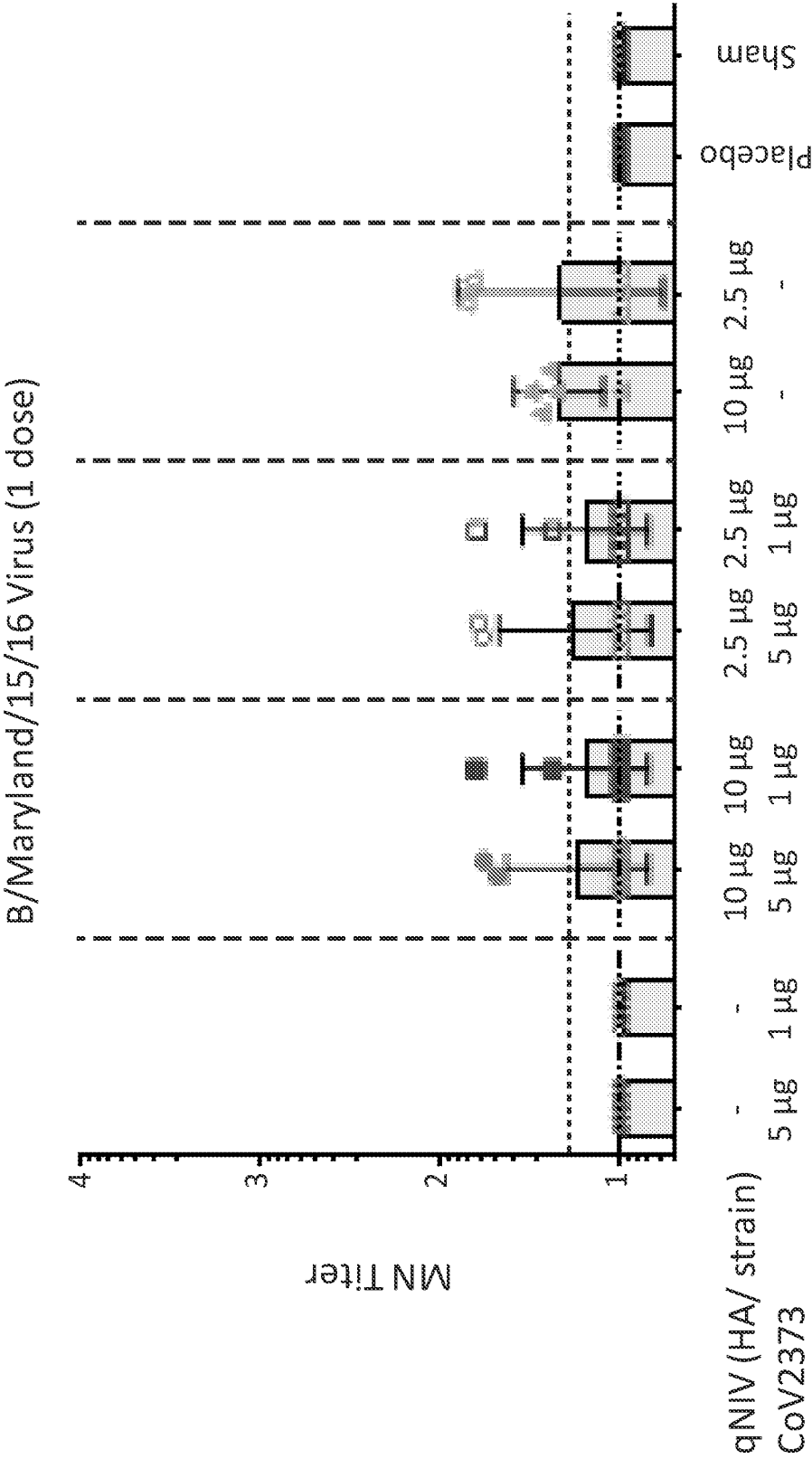


Fig. 11F



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Fig. 11G



B/Maryland/15/16 Virus (2 doses)

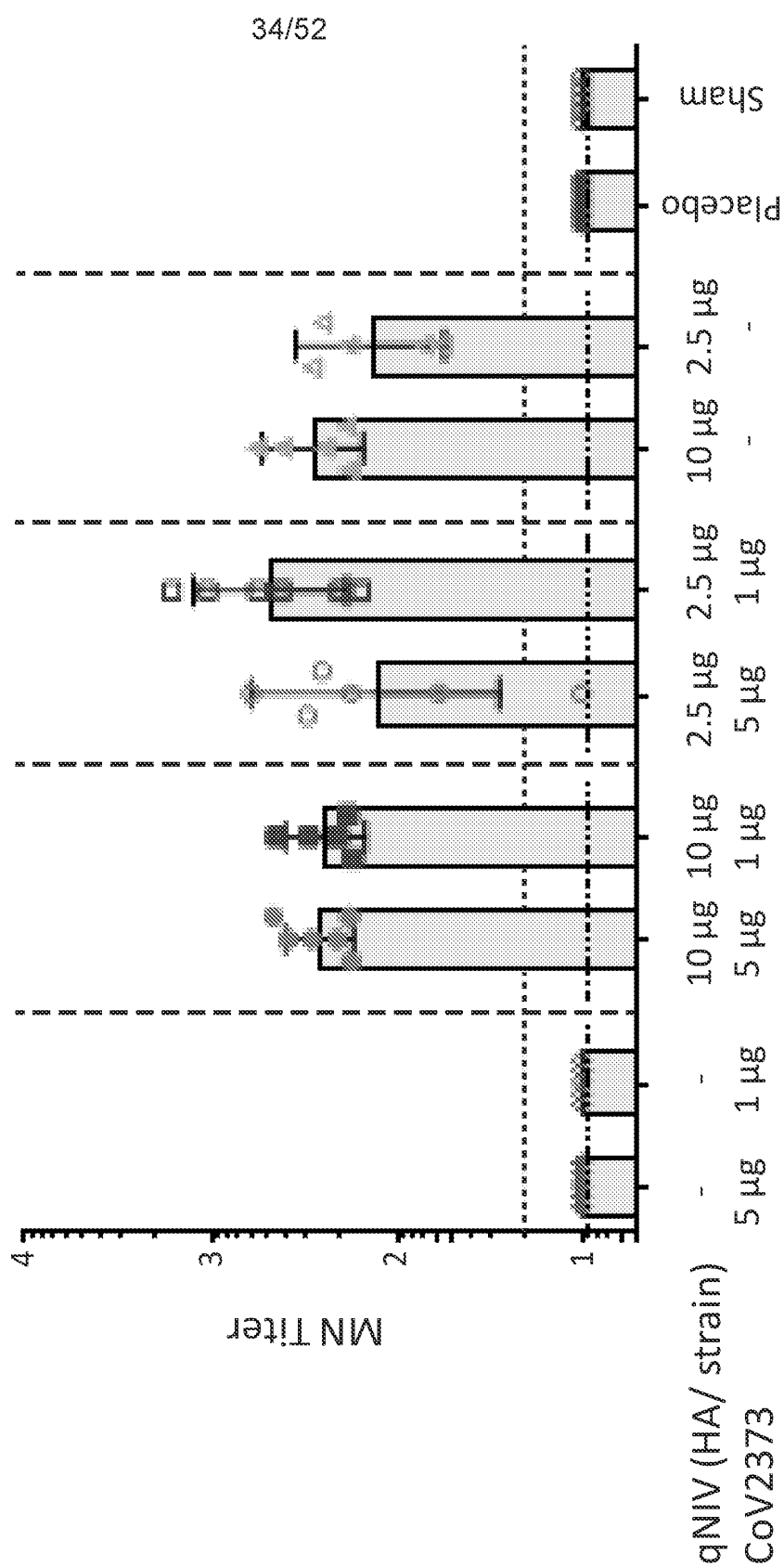
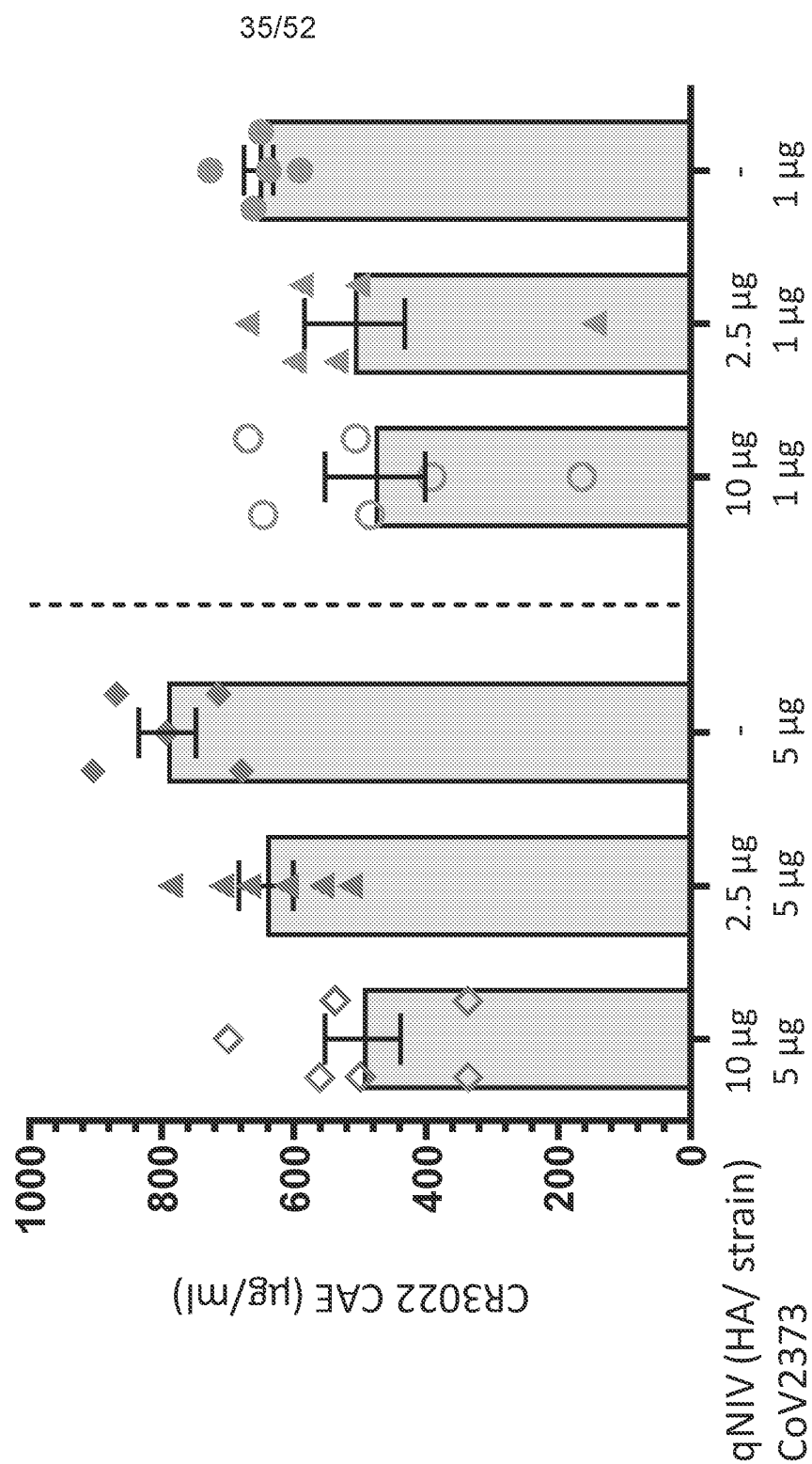
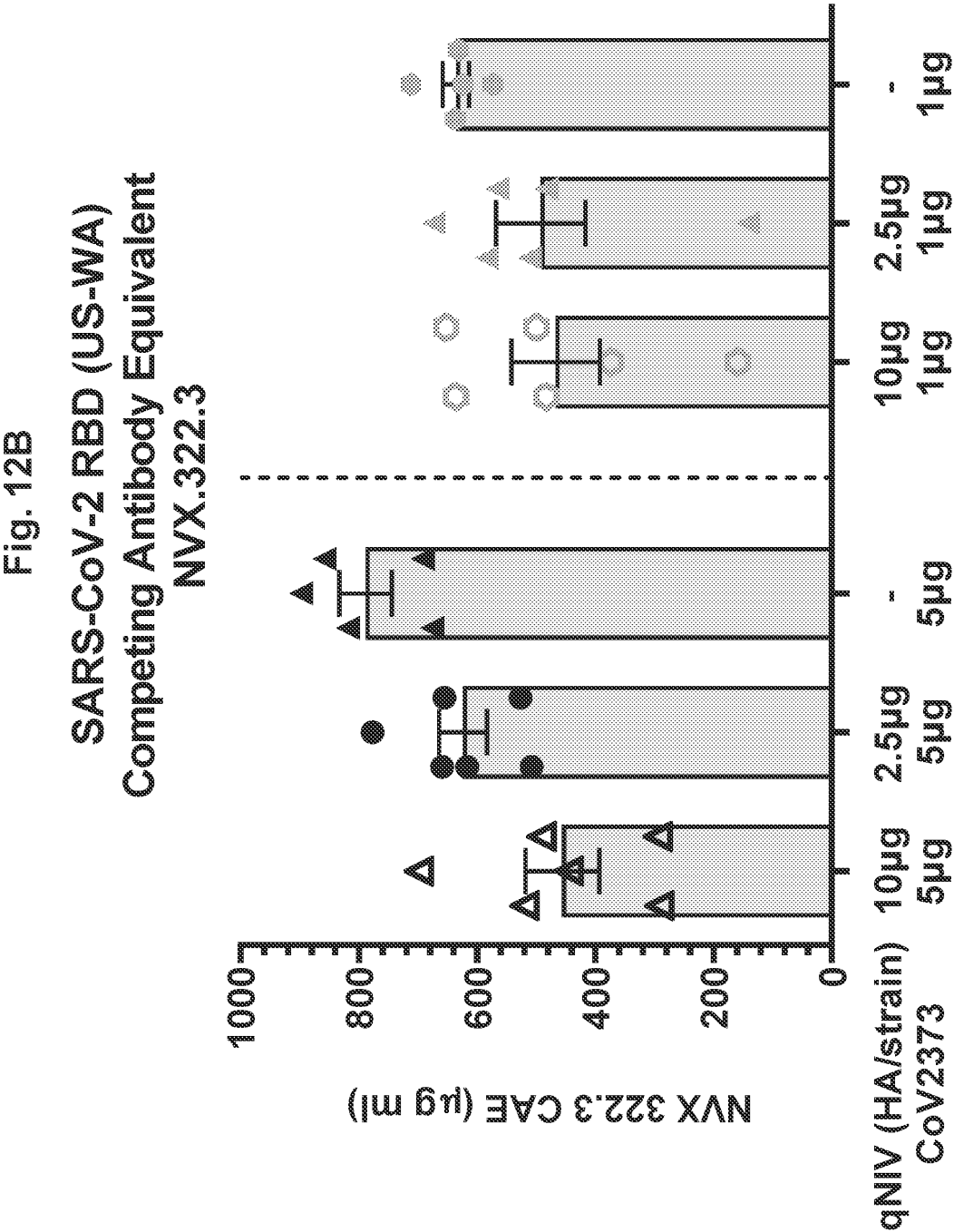
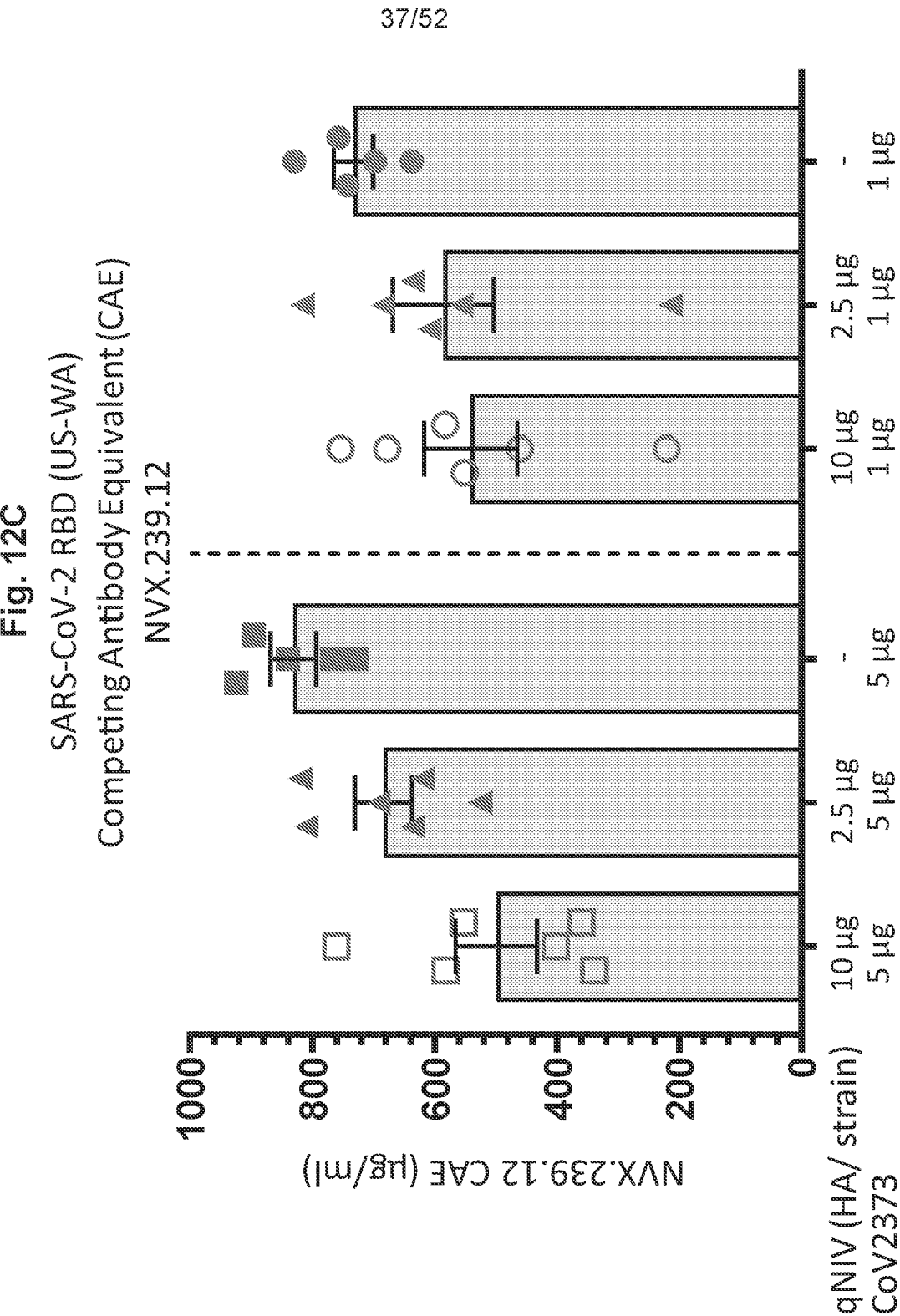


Fig. 12A







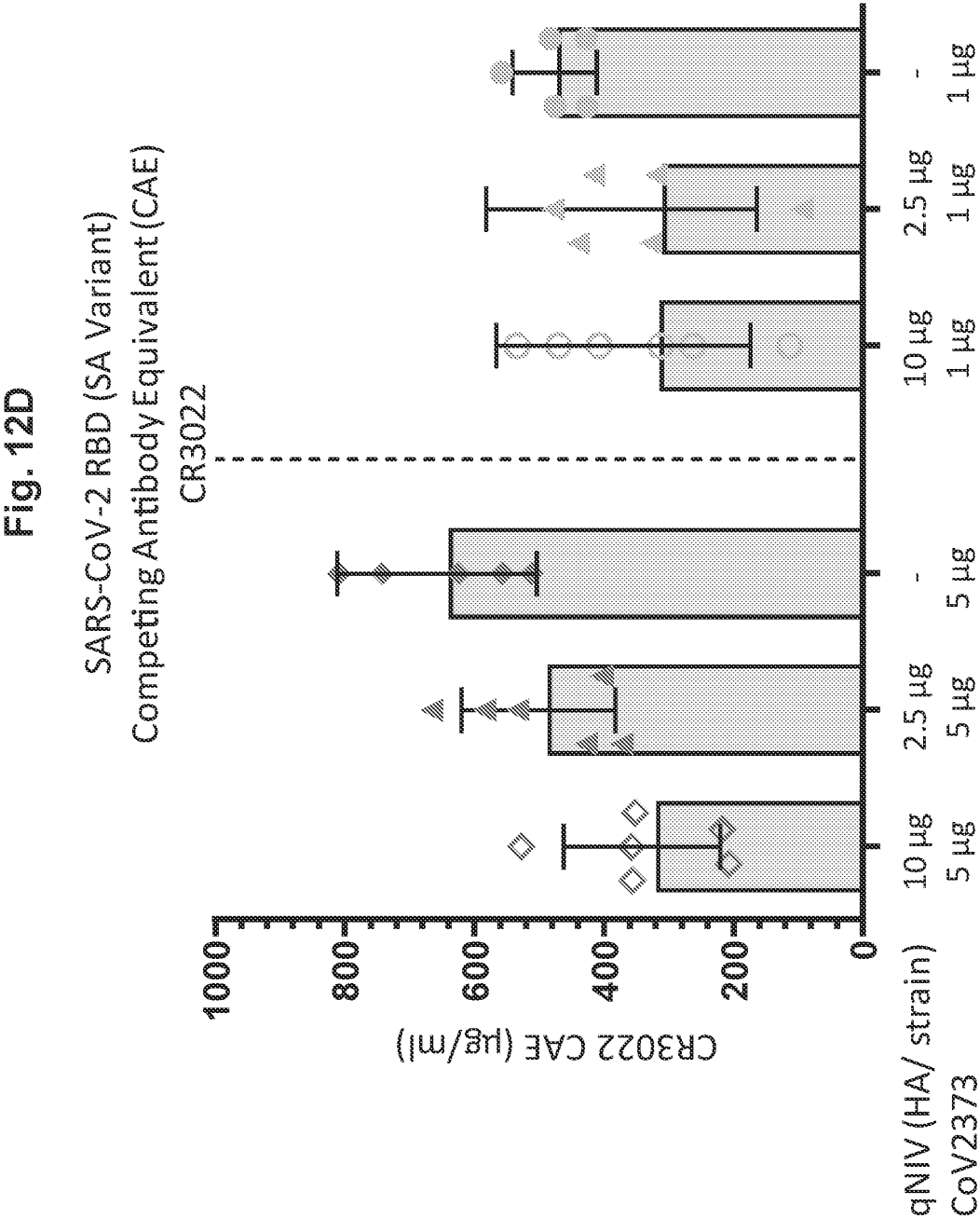
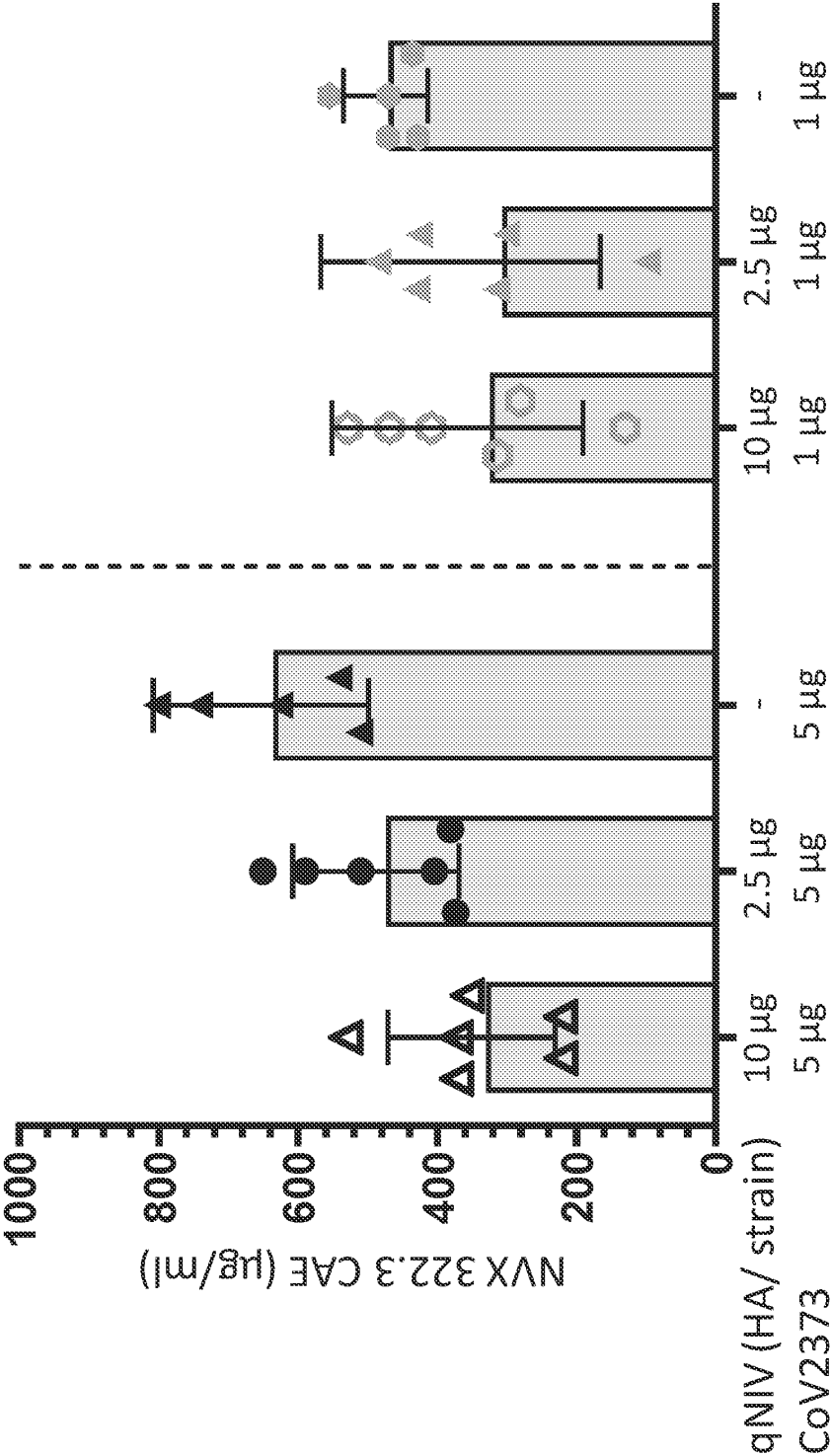


Fig. 12E
SARS-CoV-2 RBD (SA Variant)
Competing Antibody Equivalent (CAE)
NVX.322.3



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Fig. 13A

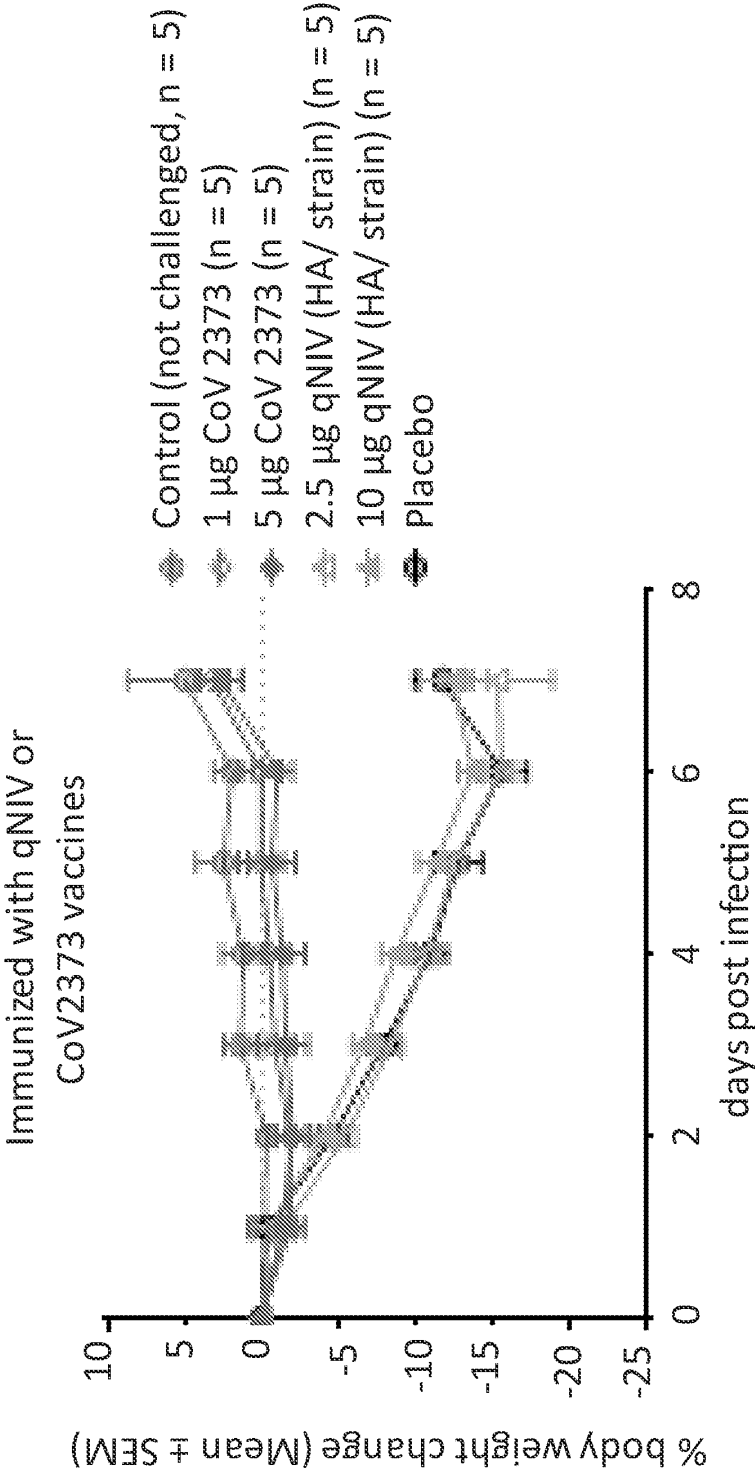


Fig. 13B

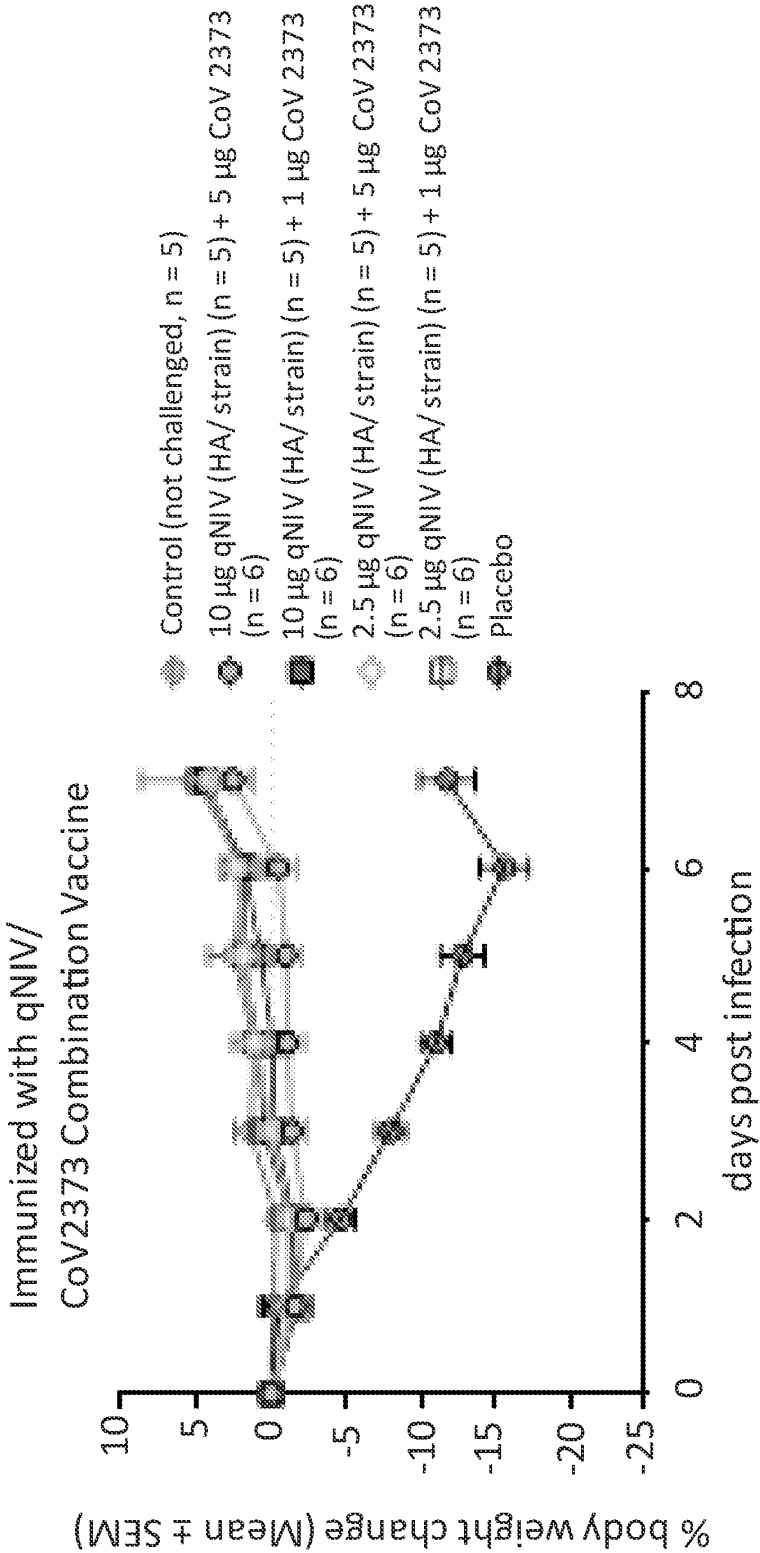
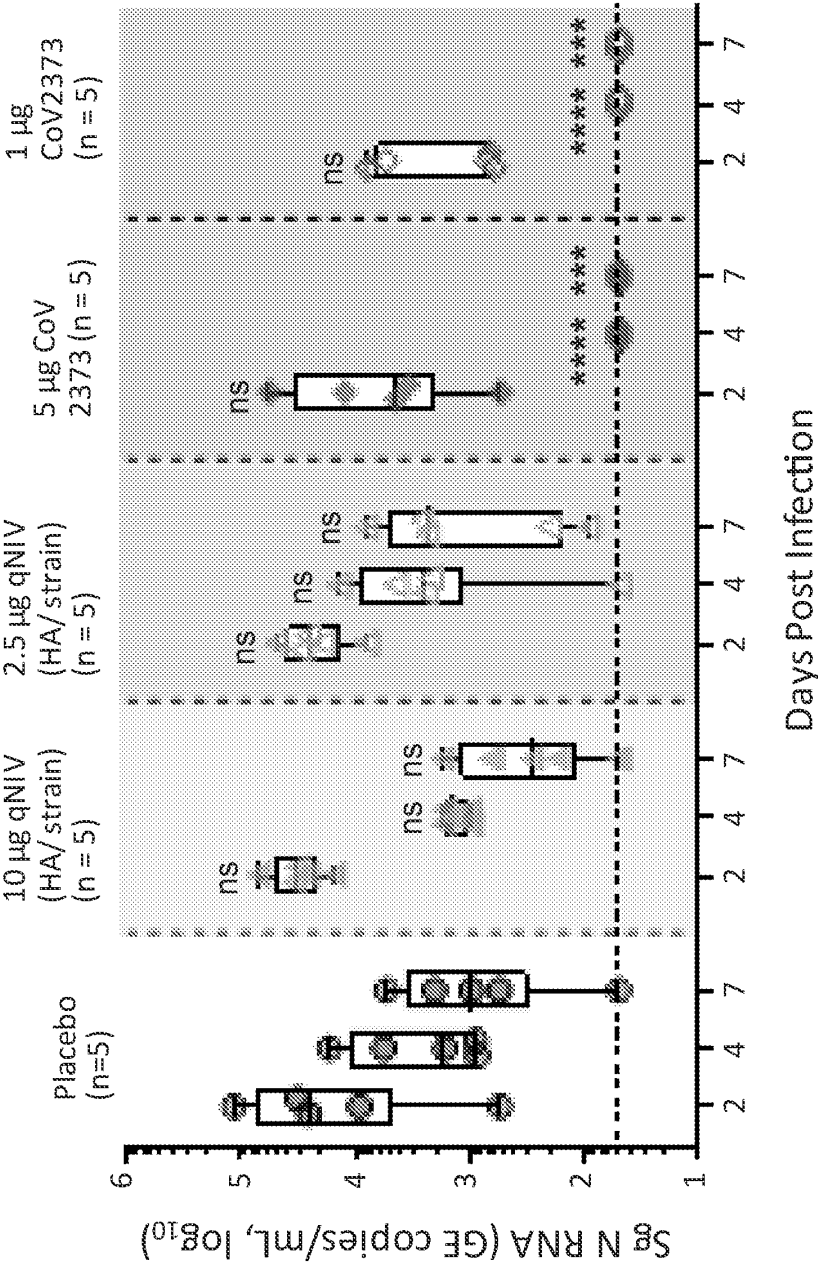


Fig. 13C
Buccal Swab sgrNA (qNIV or CoV2373 Vaccines)



Buccal Swab sgrNA (qNiv/Cov2373 combination vaccine)

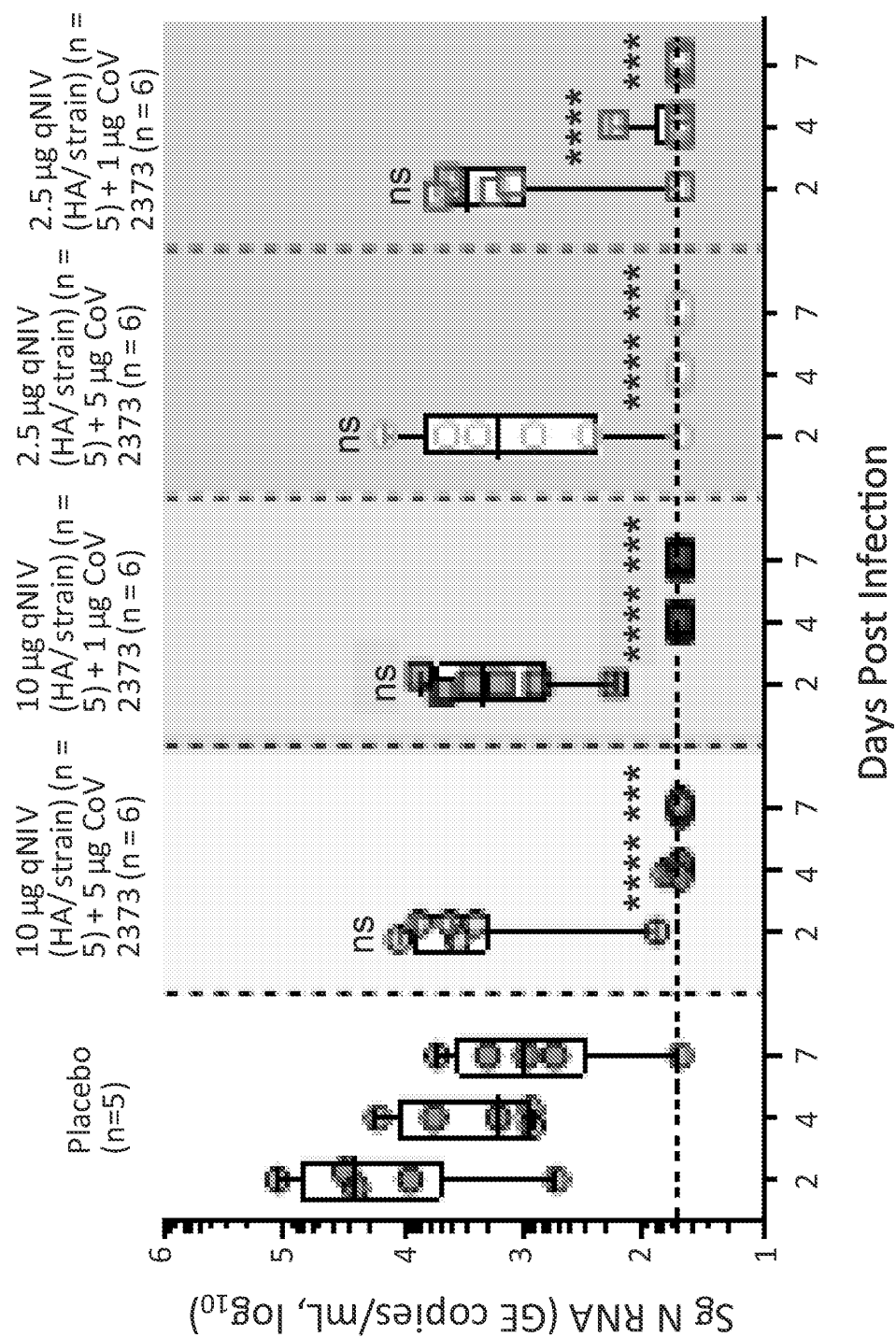
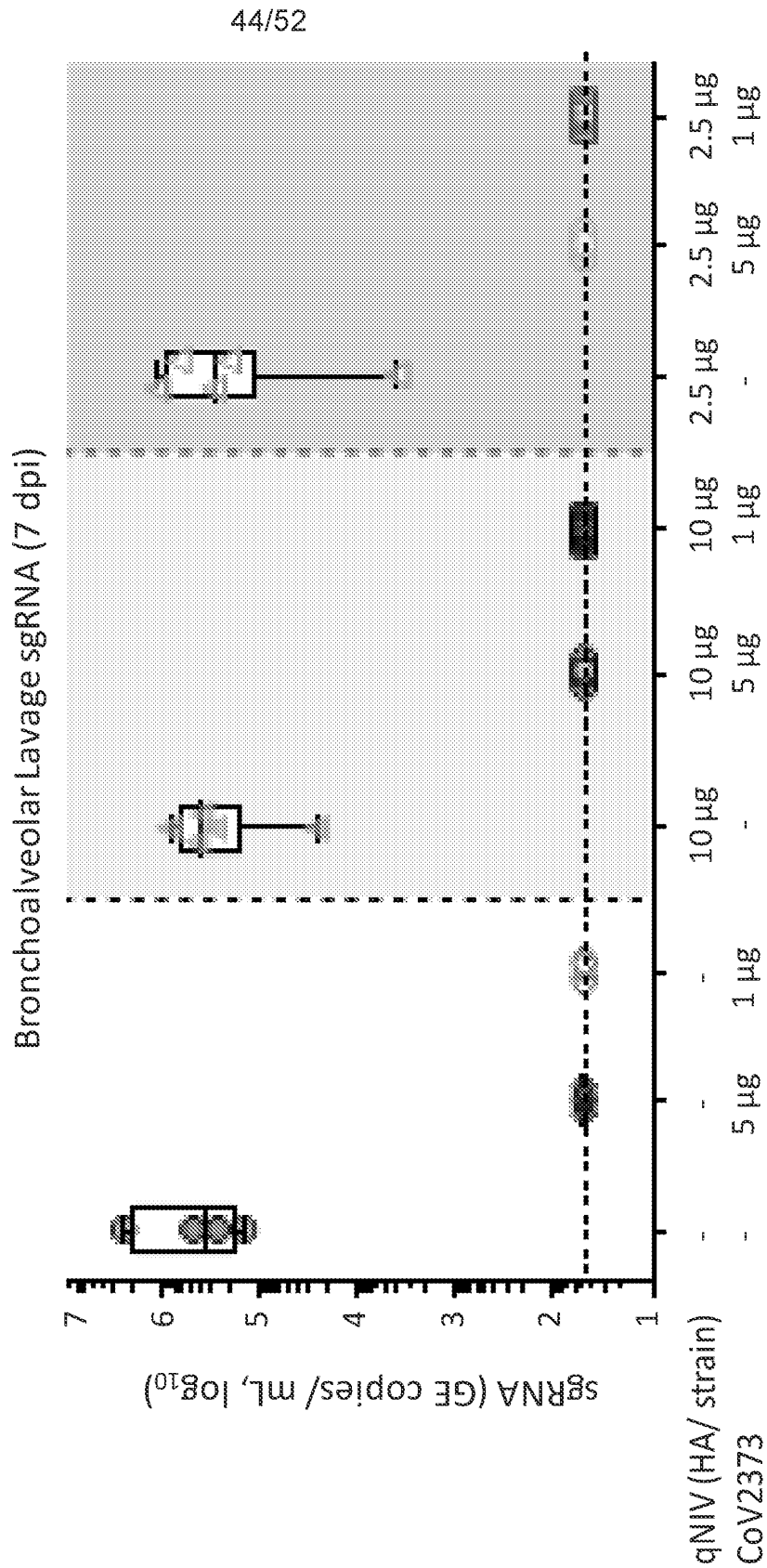
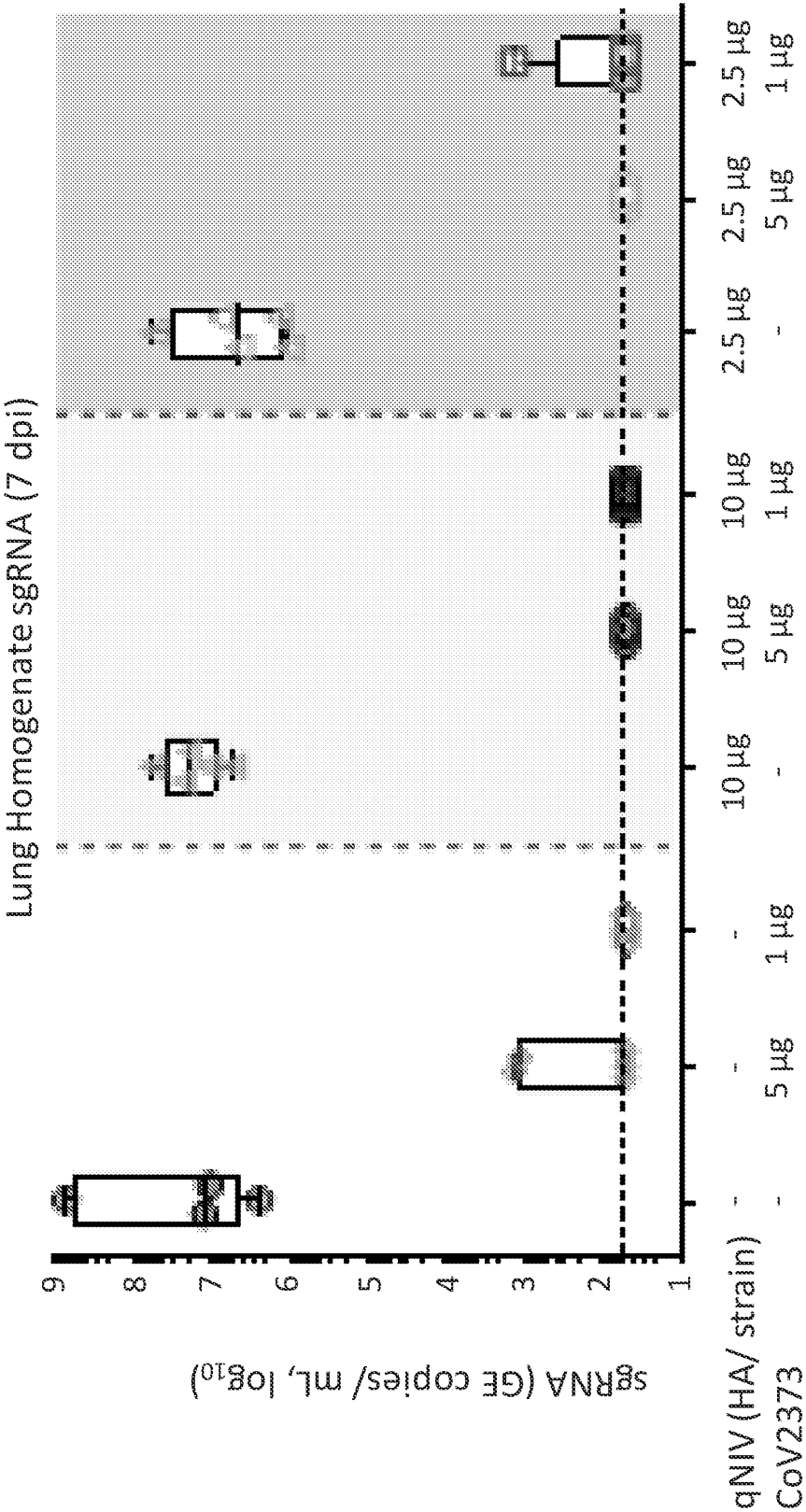


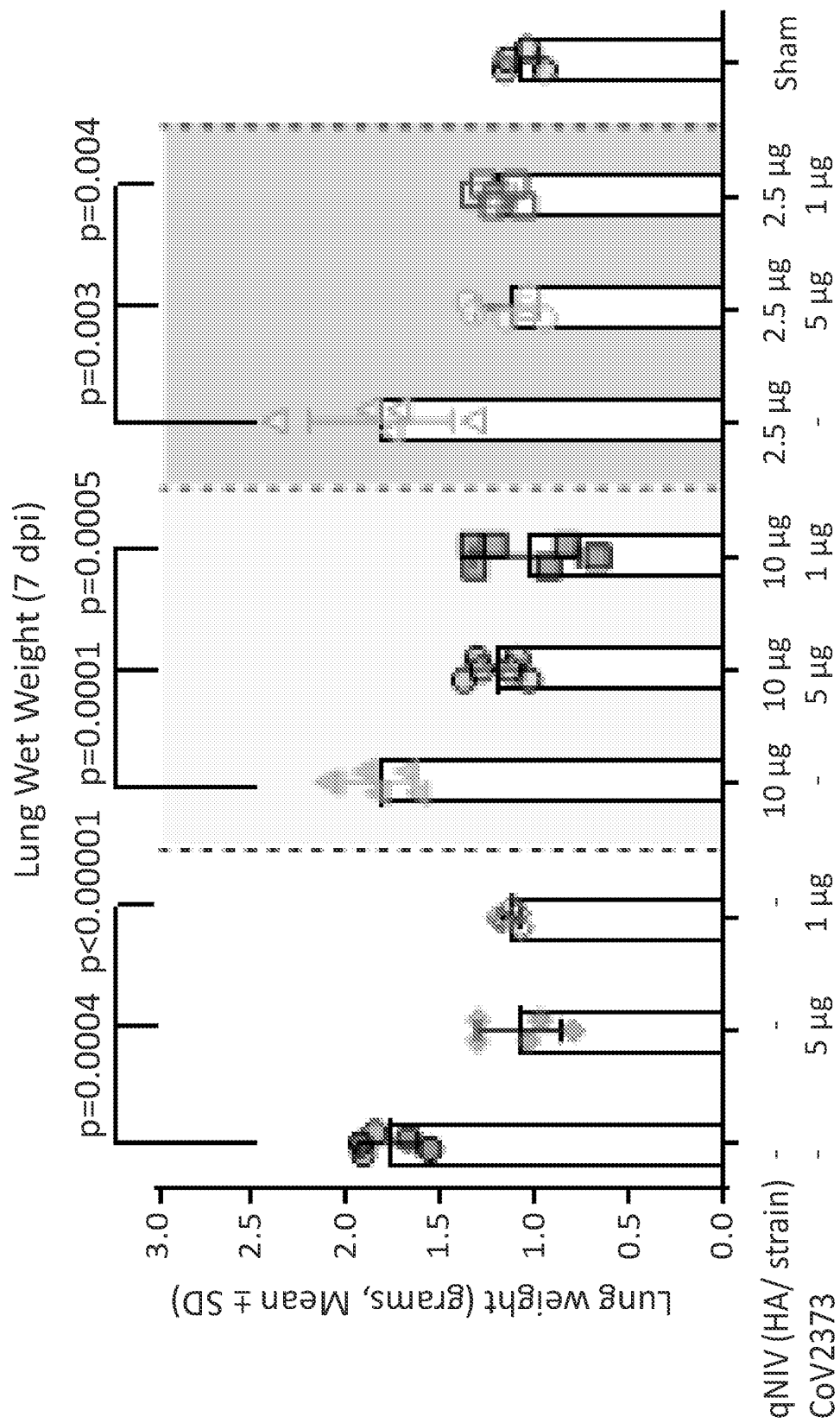
Fig. 13E



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Fig. 13F





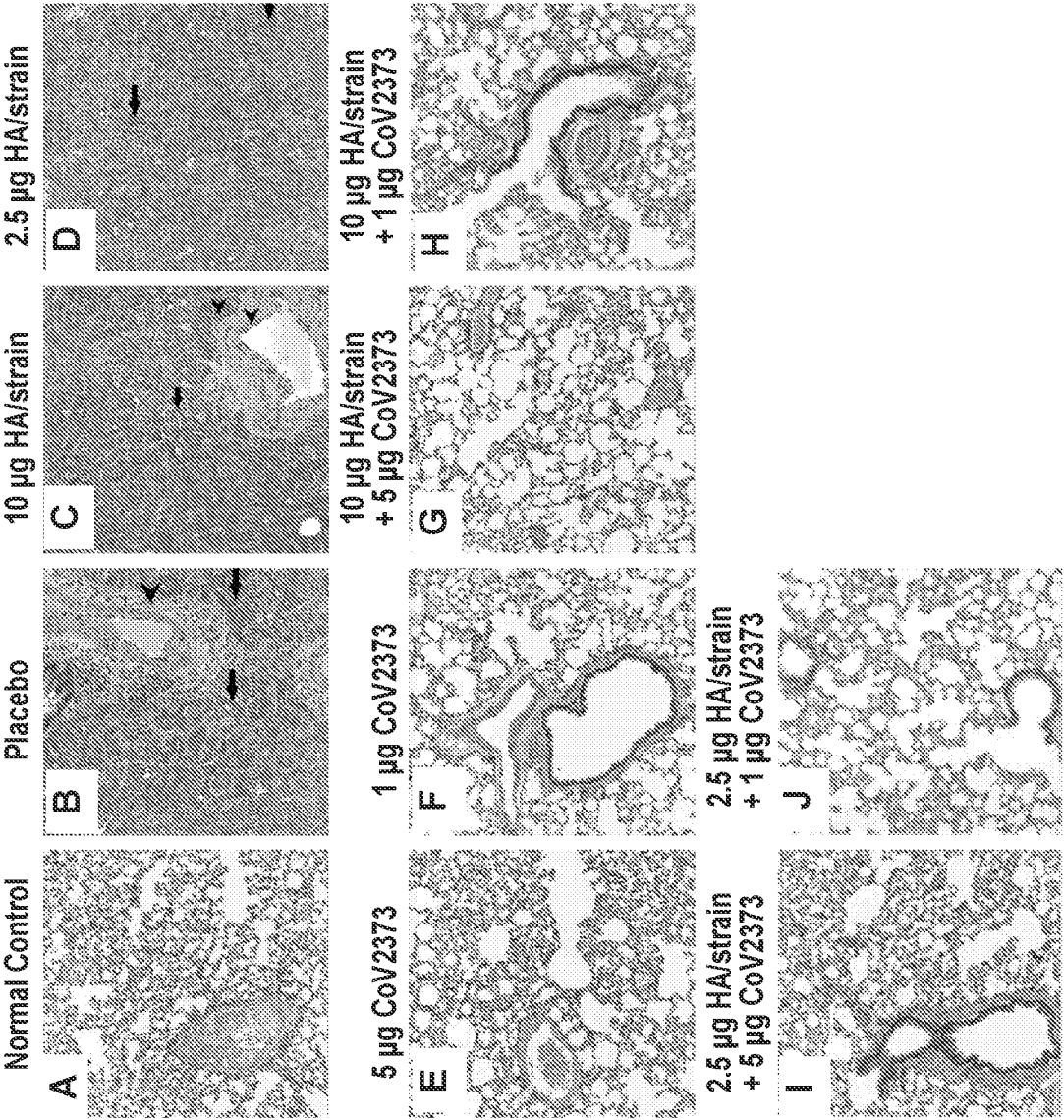
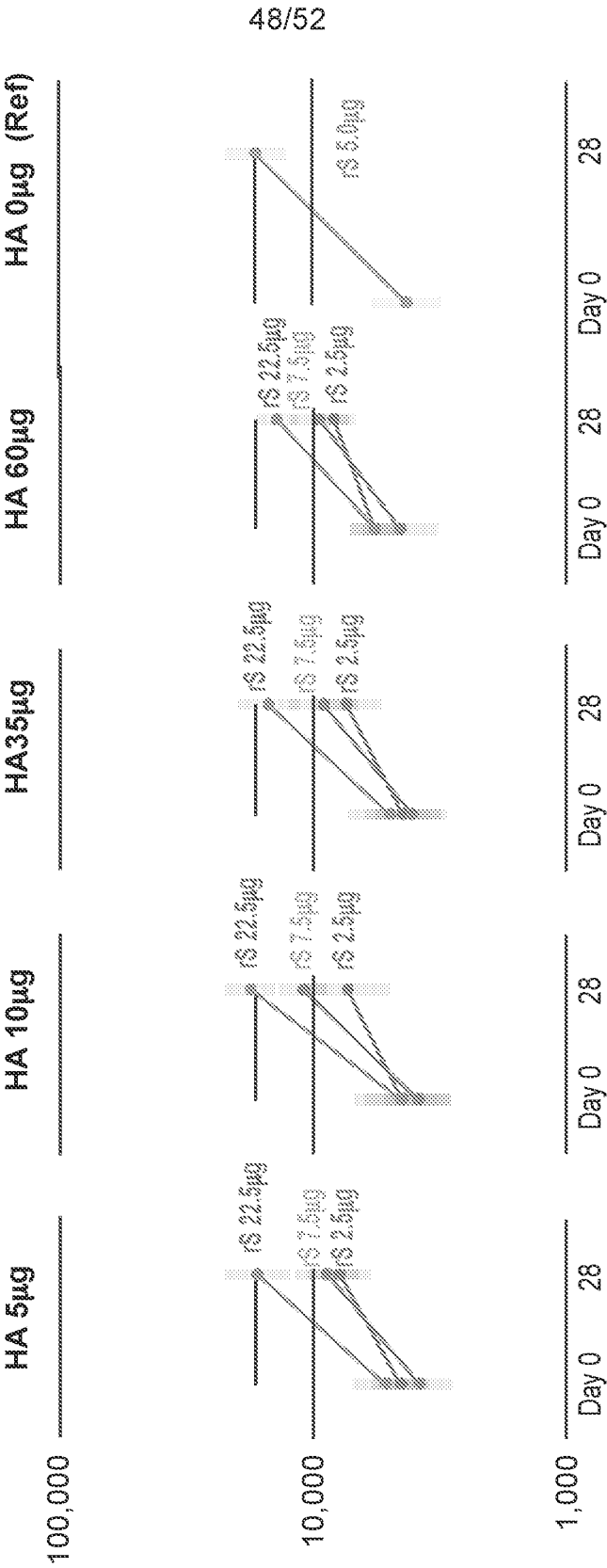


Fig. 14

Fig. 15



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Fig. 16

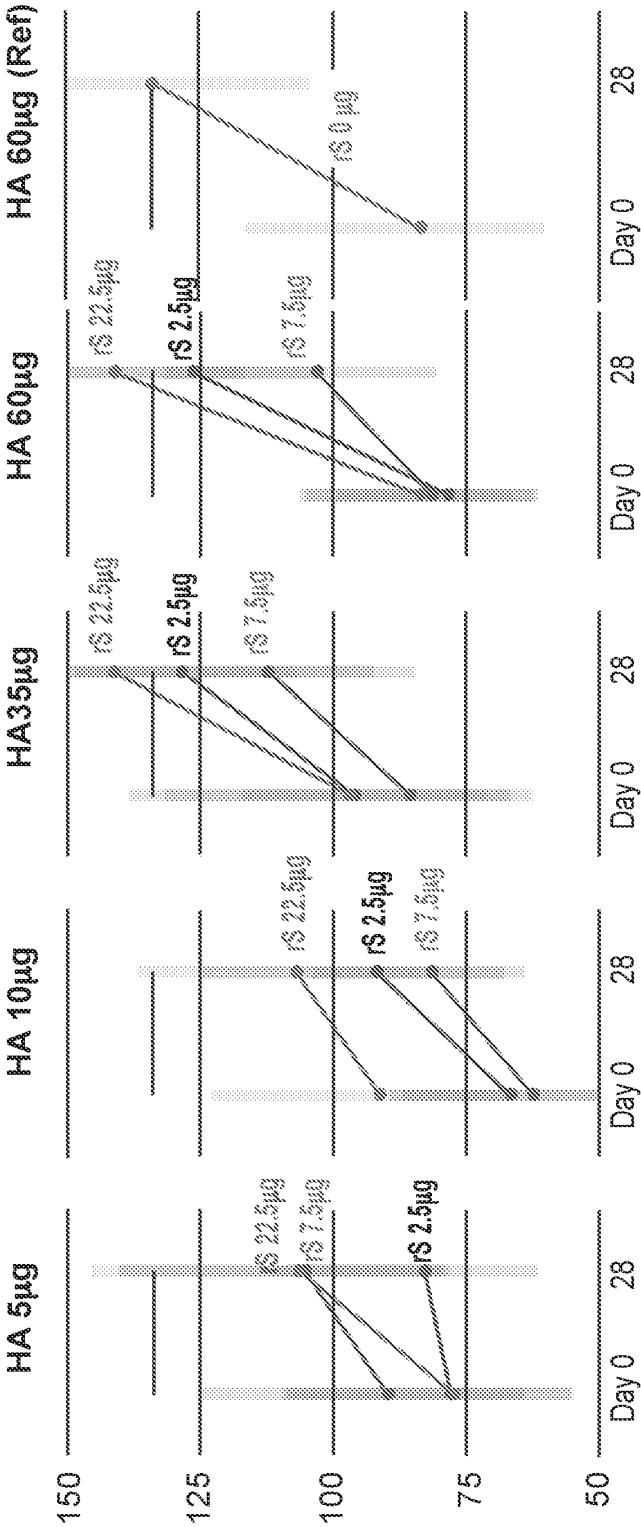


Fig. 17

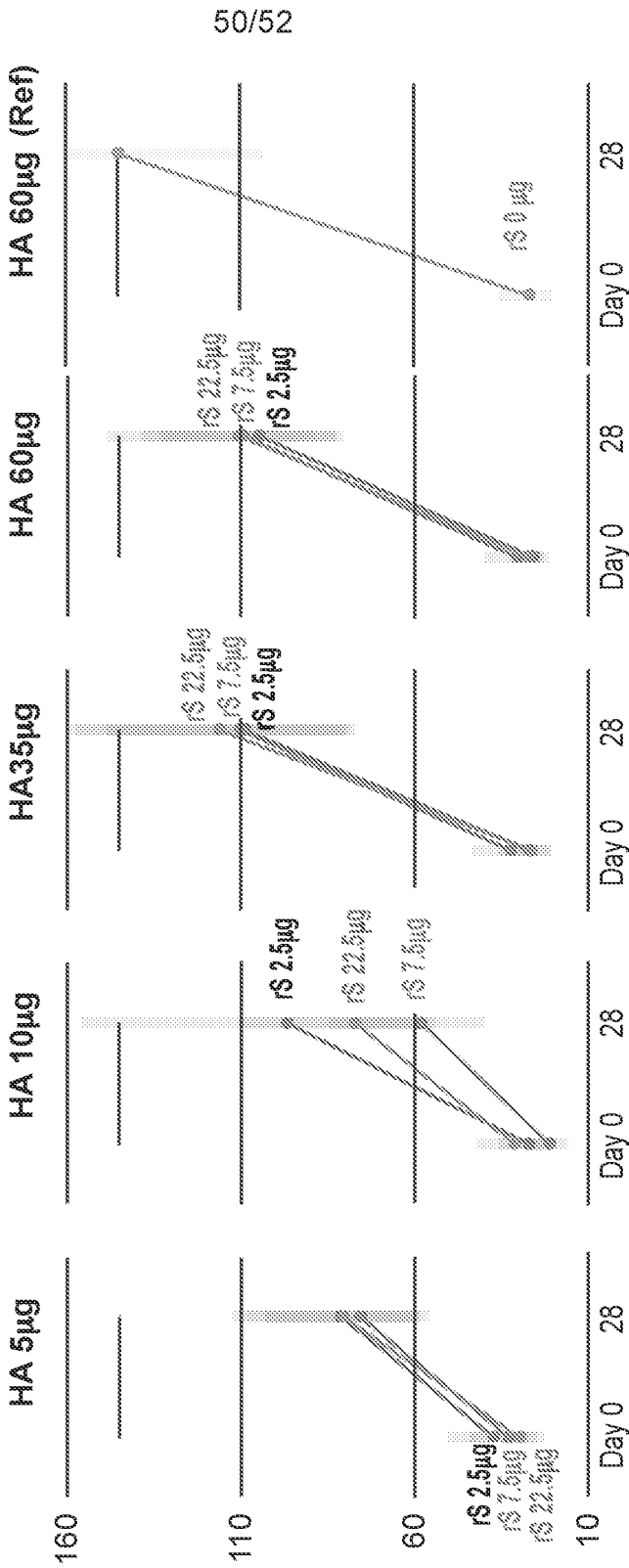


Fig. 18

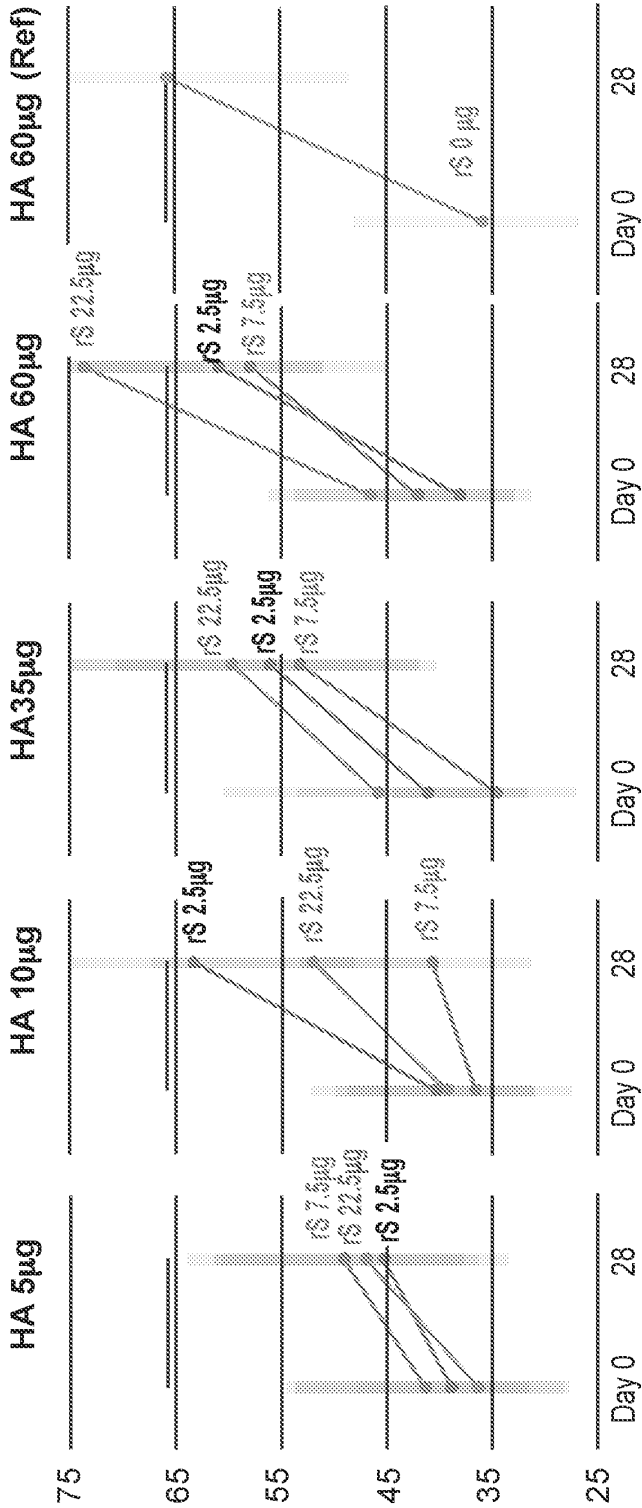


Fig. 19

