

A

DH840.H_UC	QVQLQESGPG	LVKPSSETLSL	TCAVSGYSIS	SG.YGWSWIR	QPPGKGLEWI	50
DH840.1H	....K.....	..R.....	.....T..N	.A..A.G.V.	L.....	
DH840.2H	.....	.....	..D...G...	GDY.Y.N...	.....
DH840.5H	..H.....	...S..N.T.	I.S....PL.	...L.....	.A..R.....	
DH840.H_UC	GYIGGSSGST	NYNPSLKSRV	TISKDTSKNQ	FSLKLSSVTA	ADTAVYYCAR	100
DH840.1H	MTVYT.T.N.	YSD.....	.....	...R.....V	E.....F...	
DH840.2H	.FL.TYR.TA	S.S...R...	.F.R.....	.....T....	.....
DH840.5H	.....T.HTA	....P.....	I.....F...	...T.K...T	....M....A	
DH840.H_UC	ADGYSSGWSY	FDYWGQGLV	TVSS	124		
DH840.1H	...SD...PH	..N....L..	....		
DH840.2H	E..DDYANR.	.....	S...			
DH840.5H	.YY.D..R..	..G..P....	..F.			

B

DH842.H_UC	QVQLQESGPG	VVKPSETLSL	TCAVSGGSIS	SGYYYWSWIR	QPPGKGLEWI	50
DH842.H	QV.....	LMQ.A.....	.....RD..G	....A.G.F.	.V.....	
DH842.H_UC	GGIYSNSEST	NYNPSLKSRV	TISKDTSKNQ	FSLKLSSVTA	ADTAVYYCAR	100
DH842.H	VT..TSTGNI	YDESP.....	...R.....	.....T...P	.....F...	
DH842.H_UC	EGCSSTYCSA	GWFDVWGPGV	LVTVSS	126		
DH842.H	...NTVF...	.....L	.....		

C

DH845.H_UC	QVQLQESGPG	VVKPSETLSL	TCAVSGGSIS	SGYYYWSWIR	QPPGKGLEWI	50
DH845.1H	.V.....	L.....	.....M.	.V.QG.G...	.....
DH845.2H	.L.....	L.....	.....N	.A.HG.G...	.....
DH845.3H	.L.....	L.....	.....M.	.V.QG.G...	.....
DH845.4H	.V.....	L.....	.....L.	.V.QG.G...	.....
DH845.H_UC	GGIYSNSEST	NYNPSLKSRV	TISKDTSKNQ	FSLKLSSVTA	ADTAVYYCAR	100
DH845.1H	ATT.TSTGNI	Y.....G.G	.V.R.....	.....A...	.....
DH845.2H	VSS.TSTGN.	Y.D.....	...R.....	.....	.....
DH845.3H	ATT.TSTGN.	Y.D.....	.V.R.....	.....A...	.....
DH845.4H	ATT.TSTGNI	Y.....G	.V.R.....	...R..A...	.....
DH845.H_UC	VNLGDSGYT	GVSEYFEFWG	QGALVTVSS	129		
DH845.1H	L.....D..	.....D...	.....		
DH845.2H	.G...DA.N.	.....	.....	
DH845.3H	.....D..	.....D...	.....		
DH845.4H	.....D..	.....D...	.....		

D

DH846.H_UC	QVQLQESGPG	LVKPSSETLSL	TCAVSGGSIS	DYYYWNWIRQ	PPGKGLEWIG	50
DH846.1H	.L.....	.....	..D...V...	SN.G.G....	.....D..V	
DH846.2H	.....	.....	.....S...	VN.G.G....	.....V	
DH846.H_UC	NIYGNSASTY	YNPSLKSRVT	ISKDTSKNQF	FLKLSSVTAA	DTAVYYCARK	100
DH846.1H	T...GTGN..	.A...EG..A	....A.....	S.R.N.....	.....
DH846.2H	T...GTGN..	.D.....	....A.T...	S.....	.....
DH846.H_UC	ITYSSGWYYF	DYWGQGLVLT	VSS	123		
DH846.1H	.....	.....A	...			
DH846.2H	.....	.....	...

S8 Fig. Amino acid alignments of heavy chain variable regions for each CON-S autologous neutralizing antibody clonal lineage. Amino acids for (A) DH840, (B) DH842, (C) DH845, and (D) DH846 lineages are shown. Periods indicate the presence of identical amino acids at that position. UCAs were inferred with Cloanalyst using the 2017 macaque reference library.