

Supplementary Table 1. Amino acid sequences of CBC designed NAs and predicted N-glycosylation sites

CBC NA	Sequence						
NA5200	MNPNQKIITI	GSVCMTIGMA	NLILQIGNII	SIWISHSIQL	GNQNQIETCN	QSVITYE	NNT
	NTNFAAGQSV	VSIKLAG	NSS	LCPISGWAIY	SKDNSIRIGS	KGDVFEVIREP	FISCSHLECR
	NDKHS	NGT	VK	DRSPYRTLMS	CPIGEAPSPY	NSRFESVAWS	ASACHDGMGW
	IITDTIKSWR	NKILRTQESE	CACV	NGS	CFT	VMTDGP	SDGQ
	CYPDSGKVMC	VCRDNWHGSN	RPWVSFDQNL	DYQIGYICSG	IFGDNPRSDND	GTGSCG	FPVSS
	FRYGNVWIG	RTKSISRRKG	FEMIWD	PNGW	TETDNSFSIK	QDIVAIT	TEWS
	CFWVELIRGQ	PKENTIWTSG	SSISFCGVNS	DTVGWSWPDG	ADLPFTIDK		
NA7900	MNPNQKIITI	GSICMAIGII	SLILQIGNII	SIWVSHSIQT	GSQ	NHT	GICN
	NTNVVAGKDT	TSVILAG	NSS	LCPIRGWAIY	SKDNSIRIGS	KGDVFEVIREP	FISCSHLECR
	NDKHS	NGT	VK	DRSPYRALMS	CPVGEAPSPY	NSRFESVAWS	ASACHDGMGW
	IITETIKSWR	KNILRTQESE	CVCV	NGS	CFT	IMTDGP	SDGL
	CYPDTGKVMC	VCRDNWHGSN	RPWVSFNQNL	DYQIGYICSG	VFGDNPRPKD	GTGSCG	FPVTV
	YRYGNVWIG	RTKSNSRRKG	FEMIWD	PNGW	TETDSSFLVK	QDVVAIT	DWS
	CFWVELIRGL	PREDTIWTSG	SSISFCGVNS	DTVNWSWPDG	AELPFTIDK		
NA9100	MNPNQKIITI	GSICMAIGII	SLILQIGNII	SIWVSHSIQT	GSQ	NHT	GICN
	NTNVVAGKDT	TSVILAG	NSS	LCPIRGWAIY	SKDNSIRIGS	KGDVFEVIREP	FISCSHLECR
	NDKHS	NGT	VK	DRSPYRTLMS	CPVGEAPSPY	NSRFESVAWS	ASACHDGMGW
	IITDTIKSWR	NNILRTQESE	CVCV	NGS	CFT	IMTDGP	SDGQ
	CYPDTGKVVC	VCRDNWHGSN	RPWVSFDQNL	DYQIGYICSG	VFGDNPRPND	GTGSCG	FPVTS
	FRYGNVWIG	RTKSNSRRKG	FEMIWD	PNGW	TETDSSFSVK	QDIVAIT	DWS
	CFWVELIRGL	PKENTIWTSG	SSISFCGVNS	DTVGWSWPDG	AELPFTIDK		

Supplementary Table 2. % identity shared by CBC designs and WT N1 viruses^a

Virus strain	rNA anti-sera					
	NA5200	NA7900	NA9100	PR8/34	NC/99	Bel/09
PR8/34	87%	94%	92%	100%	88%	83%
USSR/77	87%	95%	92%	91%	92%	84%
NC/99	85%	93%	90%	88%	100%	84%
Bris/07	85%	92%	90%	88%	97%	83%
Bel/09	92%	85%	88%	83%	84%	100%
NIBRG-14	91%	87%	90%	86%	85%	90%
Sw/Bel/98	89%	88%	90%	85%	85%	94%
Sing/15	91%	87%	89%	- ^b	-	97%

- a. Percent identity was determined using the BlastP suite-2 sequences software. Numbers in bold identify where an IC₅₀ of >4.3 (i.e. log₂ of dilution; 1:20) in the NI assay is observed.
- b. “-” Analysis was not done for these sequence pairings.