

Appendix Table. Molecular characteristics of HA sequence and HI tests of influenza virus A (H5N1) isolates from Cambodia, 2004–2007, and reference subtype H5N1 strains*

Reference virus, sublineages‡	HA regions and amino acids†																	Ferret serum§			
	Site E		Site B		RBS	RBS	Site A	Site A	Site A	Site B	Site B		Cleavage site			A/VNM/1194/2004	A/INDO/05/2005	A/Turkey/15/05–A/BHG/Qinghai Lake/1A/2005¶	A/Anhui/1/2005		
	22	86	94	123	124	133	136	138	140	141	155	175	184	189	195	210	325				
VNM/1194/2004	K	V	D	S	S	S	P	Q	K	S	S	L	A	K	T	V	R	X	4	2	4.5
A/INDO/05/2005	K	T	S	S	D	S	P	L	S	S	S	L	A	R	T	V	S	1.5	X	2	4.5
A/BHG/Qinghai lake/1A/2005¶	K	A	N	S	D	S	P	Q	T	T	N	L	A	R	T	V	T	2	2	X	4.5
A/Anhui/1/2005	K	A	N	S	D	S	P	Q	T	T	N	L	A	K	T	V	R	1.5	0.5	2	X
CAM 2004	K	V	D	S	S	S	P	Q	K	S	S	L	A	K	T	V	R	0	2.5	1.5	4.5
I	K	V	D	S	S	S	L	Q	Q	P	S	M	A	K	T	V	R	1.5	7	3	5
II	K	V	N	S	S	A	P	Q	K	S	S	M	A	K	T	V	R	1	3.5	1.5	4.5
III	K	V	D	S	S	S	P	L/M	K	S	S	M	A	K	T	V	R	0	3.5	1.5	4.5
IV	R	V	D	S	N	A	P	Q	K	S	S	M	A	K	T	V	R	–2	2.5	2	3
V	K	V	D	S	S	A	P	Q	K	S	S	M	E	K	I/T	V	Del/R	1	3.5	2	4.5
VI	K	V	D	S	S	A	P	Q	K	S	S	M	A	K	T	V	R	–2.5	3	3	5
VII																					
PV06	K	V	D	P	S	A	P	Q	K	S	S	M	A	K	T	T	G				
KC06	K	V	D	P	N	A	P	Q	K	S	S	M	A	K	T	T	R	1			
CAM07	K	V	D	P	S	A	P	Q	K	S	N	M	A	N	T	T	G	2–4	7	3	5
VNM06-07	K	V	V	P	S	A	P	Q	K	S	S	M	A	K	T	V	G				

*HA, hemagglutinin; HI, hemagglutination inhibition; RBS, receptor binding site; Del, deletion; BHG, bar-headed goose; VNM, Vietnam; CAM, Cambodia; INDO, Indonesia; WHO, World Health Organization.

†H5 amino acids numbering.

‡Numbers I–VII refer to sublineages; within sublineage VII, PV06 = group of viruses represented by the strain A/duck/Cambodia/D1PV/2006; KC06 = group of viruses represented by the strain A/duck/Cambodia/D1KC167/2006; CAM07 = group of viruses represented by the strain A/Cambodia/R045050/2007; VNM06-07 = group of viruses isolated in South Vietnam in 2006 and 2007.

§Antigenic characterization was performed using the HI assay with ferret antisera raised to WHO reference subtype H5N1 viruses. Numbers are the results of the differences between the log₂ (HI titer/10) of the reference virus and the virus tested.

¶For HI tests, the virus A/BHG/Quinghai Lake/1A/2005 was tested against the reassortant virus NIBRG-23 derived from A/Turkey/15/2005. A/BHG/Quinghai Lake/1A/2005, and A/Turkey/15/2005 are both clade 2.2 viruses.