

**Table S1. TPL and SHB2 domains of AI viruses grouped according to the corresponding hemagglutinin (H) subtypes.**

	Total:427 TPL Sequence	Total:427 SHB2 Sequence
Consensus	KRΦMARRΨESEΨ	PPφP×K
	KRYMARRVESEV (325)	PPLPpK (289/325) PSLPpK (27/325) PSFPpK (4/325) PPLSpK (1/325) LPLPpK (1/325) PPLPsK (1/325) PPFPpK (3/325)
	KRYMERRVESEI (65)	PPLSpK (49/65) LPLSpK (2/65) LPISpK (1/65) PPLStK (12/65) PPLsK (1/65)
	KRYMARRIESEV (27)	PPLPpK (27/27)
	KRYMARRVESEI (8)	PPLPpK (8/8)
	KRFMARRVESEV (2)	PPLPpK (2/2)
Genotypes	TPL Sequence	
H1N1	KRYMARRVESEI	
H3N6/8	KRYMARRIESEV	
H4N5/6/8/9	KRYMARRIESEV KRFMARRVESEV	

H5N1/2/3	KRYMARRIESEV KRYMARRVESEV
H6N1/2/3	KRYMARRVESEI KRYMARRIESEV KRFMARRVESEV
H7N1/2/3	KRYMARRVESEV KRYMERRVESEI KRYMARRIESEV
H9N2	KRYMARRVESEI
H10N7	KRYMARRIESEV
H11N9	KRYMARRIESEV

$\Phi$  = hydrophobic;  $\Psi$  = aliphatic