## **Supplementary Table 2**

Protein	<b>Target Sequence</b>	<b>Template Structures</b>	Template Region	Template Sequence	<b>Sequence Identity</b>	Region	Coverage
PB2	A/Aichi/2/1968 (H3N2)	4wsbC	1-482, 491-741	A/little yellow-shouldered bat/Guatemala/060/2010 (H17N10)	67%	1-759	100%
PB1		4wsbB	1-194, 199-490, 492-647, 650-733, 736-754		79%	1-757	100%
PA		4wsbA	1-185, 204-714		70%	1-716	100%
HA1		3hmgA	1-225, 227-326	A/Aichi/2/1968 (H3N2)	100%	1-328	100%
HA2		3hmgB	1-175		100%	1-175	79%
NP		4x9aA	21-72, 92-202, 213-396, 403-428, 438-489	A/Wilson-Smith/1933 (H1N1)	91%	- 21-498	96%
		3zdpB	21-391, 408-498		92%		
NA		3tiaA	82-469	A/RI/5+/1957 (H2N2)	88%	81-469	83%
		2aepA	82-469	A/Memphis/31/98(H3N2)	98%		
M1		1ea3	2-158	A/Puerto Rico/8/1934 (H1N1)	98%	1-160	63%
		5cqeB	1-159		98%		
M2		2ly0A	22-49, 51-62	A/Chiba/5/71 (H3N2)	97%	18-62	47%
		2n70A	18-60	A/Udorn/307/1972(H3N2)	87%		
NS1		1ailA	1-70	A/Udorn/307/1972 (H3N2)	90%	- 1-230	97%
		4ophA	2-37, 29-40, 42-203	A/blue-winged teal/MN/993/1980 (H6N6)	85%		
		3d6rB	83-202	A/Duck/Alberta/60/1976 (H12N5)	73%		
		3ee9A	84-205	A/Udorn/307/1972(H3N2)	94%		
NS2		1pd3	64-85, 87-103, 105-116	A/Puerto Rico /8/1934(H1N1)	96%	63-116	45%

Table S2: Overview of protein modeling for H3N2 protein

This table provides detailed information about the homology modeling of all H3N2 proteins.