

Supplementary Table 1

Protein	Target Sequence	Template Structures	Template Region	Template Sequence	Sequence Identity	Region	Coverage
PB2	A/California/07/2009(H1N1)	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		72%	1-716	100%
HA1		3m6sA	1-322	A/Darwin/2001/2009 (H1N1)	99%	1-326	99%
		3lzgA	11-325	A/California/04/2009(H1N1)	99%		
HA2		3m6B	1-170	A/Darwin/2001/2009 (H1N1)	98%	1-175	100%
		3lzgB	1-175	A/California/04/2009(H1N1)	98%		
NP		3ro5A	22-71, 91-198, 212-429, 439-479, 485-497	A/Wilson-Smith/1933 (H1N1)	92%	21-498	96%
		3ro5B	22-83, 88-199, 214-246, 248-393404-428, 441-479, 486-491		92%		
NA		4b7QA	83-350, 352-469	A/California/07/2009(H1N1)	100%	83-469	83%
M1		3md2A	4-67, 77-85, 89-157	A/California/04/2009 (H1N1)	100%	1-157	62%
		5cqeA	1-71, 73-158	A/Puerto Rico /8/34(H1N1)	95%		
M2		2n70A	18, 20-30, 32-49, 51-60	A/Udorn/307/1972(H3N2)	81%	18-62	47%
		2kihA	23-30, 32-49, 51-60		84%		
		2l0jA	22-49, 51-62		83%		
NS1		3m5rB	79-203	A/California/07/2009(H1N1)	100%	1-219	100%
		4opaB	2-37, 41, 42-49, 85-203	A/blue-winged teal/MN/993/1980(H6N6)	84%		
		3m8aA	1-72	A/California/07/2009(H1N1)	100%		
NS2		1pd3	64-85, 87-103, 105-116	A/Puerto Rico /8/1934(H1N1)	96%	64-114	42%

Table S1: Overview of protein modeling for pH1N1 protein

This table provides detailed information about the homology modeling of all pH1N1 proteins.