

Table 10. Conservancy analysis of protective antibody/T cell epitopes

Epitope Type	Sequence	Source Species	Source Protein	Protected Host Species	H1N1							H3N2							H5N1		
					A/Brevig Mission/1/18	A/New Caledonia/20/99	A/PR/8/34	A/Taiwan/1/86	A/Texas/36/01	A/USSR/90/77	A/WSN/33	A/Bangkok/1/79	A/Beijing/353/89	A/England/42/72	A/Hong Kong/1/68	A/Leningrad/360/86	A/New York/5/2004	A/Panama/2007/99	A/UDORN/307/72	A/Hong Kong/156/97	A/Viet Nam/119/4/2004
Antibody	MSLLTEVETPIRNEWGCRNDSSD	A/WSN/33(H1N1)	M2	MOUSE	96	63	96	63	63	100	100	63	63	100	100	63	96	63	63	83	88
Antibody	SLLTEVETPIRNEWGCRNDSSD	A/AICHI/2/68(H3N2); A/PUERTO RICO/8/34(H1N1); A/USSR/90/77(H1N1)	M2	MOUSE; RHESUS MONKEY	96	65	96	65	65	100	100	65	65	100	100	65	96	65	65	83	87
Antibody	NVPEKQTRGIFGAIGFIE	INFLUENZA A VIRUS	HA	MOUSE	74	74	74	74	74	74	74	100	100	95	95	100	100	100	95	58	58
Antibody	WTGVTQN	A/AICHI/2/68(H3N2); A/TEXAS/1/77(H3N2)	HA	MOUSE	43	43	43	43	43	43	43	86	71	100	100	86	100	86	100	43	43
Antibody	SKAFSNCYPYDVPDYASL	A/MEMPHIS/6/86(H3N2); A/TEXAS/1/77(H3N2)	HA	RABBIT	39	33	39	33	33	33	39	100	94	94	100	100	94	94	100	44	39
Antibody	G47,I48,T49,N50,K51,V52,N53,S54,I55,I56,D57,K58,T318,G319,P320,R321,N322	A/MALLARD DUCK/PA/10218/84(H5N2)	HA	MOUSE	29	35	35	35	35	35	35	35	35	35	35	35	29	29	35	35	35
Antibody	G49,K50,L59,D60,I62,D63,P74,H75,V78,F79,R90,K92,F94,P143,D271,P273,I274,D275	A/AICHI/2/68(H3N2); A/X-31(H3N2)	HA	MOUSE	28	28	28	28	28	28	33	67	61	83	100	67	56	61	89	28	28
Antibody	L70, L71, V73, R74, S75, E115	A/PUERTO RICO/8/34(H1N1); A/PUERTO RICO/8/34/MOUNT SINAI(H1N1)	HA	MOUSE	67	67	100	67	67	67	83	50	50	50	50	50	50	50	50	67	67
Antibody	T318, G319, L320, R321, N322, G47, I48, T49, N50, K51, V52, N53, S54, V55, I56, E57, K58	INFLUENZA A VIRUS	HA	MOUSE	29	41	29	29	29	29	35	41	41	41	41	41	29	29	41	35	35
T cell	MGLIYNRM	A/ANN ARBOR/6/60(H2N2); A/PUERTO RICO/8/34(H1N1)	M1	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
T cell	TYQRTRALV	INFLUENZA A VIRUS; A/ANAS ACUTA/PRIMORJE/695/76(H2N3); A/MEMPHIS/1/71H-A/BELLAMY/42N); A/NT/60/68/(H3N2); A/PORT CHALMERS/1/73(H3N2); A/PUERTO RICO/8/34(H1N1)	NP	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
T cell	TYQRTRALVRTG	INFLUENZA A VIRUS; A/PUERTO RICO/8/34(H1N1); A/TEXAS/1/77(H3N2); A/X-31(H3N2)	NP	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
T cell	SSYRRPVG I	INFLUENZA A VIRUS; A/ANN ARBOR/6/60(H2N2); A/NT/60/68/(H3N2); A/PUERTO RICO/8/34(H1N1)	PB1	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
T cell	ASNENMETM	INFLUENZA A VIRUS; A/ANAS ACUTA/PRIMORJE/695/76(H2N3); A/PUERTO RICO/8/34(H1N1); A/X-31(H3N2); INFLUENZA A VIRUS H3N2	NP	MOUSE	100	67	100	89	67	89	100	89	78	89	78	78	78	78	89	78	89
T cell	RTFSFQLI	A/AICHI/2/68(H3N2); A/MEMPHIS/102/72(H3N2); A/PUERTO RICO/8/34(H1N1)	NS2	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88
T cell	PNGYIEGK	A/PUERTO RICO/8/34(H1N1)	PA	MOUSE	100	100	100	100	100	100	100	88	88	88	100	88	88	88	88	88	88
T cell	VTGLRNIPS	A/PUERTO RICO/8/34(H1N1)	HA	MOUSE	89	100	100	100	100	100	100	56	56	56	56	56	56	56	56	67	67
T cell	ALNNRFQIKGVELKS	A/MEMPHIS/1/71(H3N2)	HA	MOUSE	33	47	40	47	47	47	47	100	100	33	100	100	100	100	100	53	47

Identity level color code:

100%
 ≥90%
 ≥80%