

A/swine/Gent/172/2008	QDLPGKGNNT	ATLCLGHHAV	PNGTLVKTIT	DDQIEVTSAT	ELVQNFSMGK	ICKNPHRILD	GANCTLIDSL
A/swine/Gent/1/1984	.EN..S.	.K.....	N	N	S	..N...V	A
A/swine/England/163266/1987	.GFSRNDI	.....	.....N	N	SS.T	..N.....	MD...V.A
A/swine/Texas/4199-2/1998	.K...ND.S	.....	.....N	N	SS.T.R	..DS.....	.K.....A
A/swine/Minnesota/593/1999	.K...ND.S	.....	.....N	N	SS.T.R	..DS.....	.K.....A
A/swine/Ontario/33853/2005	.K...SD.SM	.....	.....N	N	SS.T.R	..NS..Q..	.K.....A
A/swine/Penn/A01076777/2010	.K...SD.S	.....	.....N	N	SS.T.R	..NS..Q..	.K.....A
A/Indiana/08/2011	.K...SD.SM	.....	.....N	N	SS.T.G	..NS..Q..	.K.....A
A/swine/Iowa/A01049750/2011	.K...ND.SM	.....	.....V..N	N	SS.T.R	..NS..Q..	.K.....A
A/Victoria/3/1975	ND.S	.....	.....N	N	SS.T	..N.....	.I.....A
A/England/427/1988	.K...ND.S	.....	.....N	N	SS.T.R	..DS.....	.K.....A
A/Nanchang/933/1995	.K...ND.S	.....	.....N	N	SS.T.R	..DS.....	.K.....A
A/Wisconsin/67/2005	.K...ND.S	I..	N	N	SS.T.G	..DS..Q..	.E.....A
A/Perth/16/2009	.K...ND.S	I..	N	N	SS.T.E	..DS..Q..	.K.....A
A/Victoria/361/2011	.K...ND.S	I..	N	N	S.I.E	..DS..Q..	.E.....A

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A/swine/Gent/172/2008	LGDPHCD	NEK	WDLFIER	SKAFSNCYPY	DVPEYTSRLSL	IASSGTLEFT	NEDFNWGTW	TONGGSACK
A/swine/Gent/1/1984	.....	.....	.....V..	.....	.....D.A	I	G..	N..
A/swine/England/163266/1987	.....	.....	.....V..	.....	.....D.A	V..	G..V	.....
A/swine/Texas/4199-2/1998	.....	KE	.....	.....Y..	D.S	V..	.....	A.D...YS
A/swine/Minnesota/593/1999	.....	KE	.....	.....Y..	D.S	V..	.....	A.D...YS
A/swine/Ontario/33853/2005	.....	D..KE	V..	T.Y.....	Y..D.A	V..	Q.S.....	A.D.S.Y..R
A/swine/Penn/A01076777/2010	.....	D..KE	V..	T.Y.....	Y..D.V	V..	Q.N.....	A.D.S.Y..R
A/Indiana/08/2011	.....	D..KE	V..	T.Y.....	Y..D.AT	V..	Q.S.....	A.G.S.Y..R
A/swine/Iowa/A01049750/2011	.....	E..TE	V..	T.Y.....	Y..D.S	V..	Q.S.D...	A.D.S.Y..R
A/Victoria/3/1975	.....	.....	.....V..	.....	.....D.A	V..	I	G..
A/England/427/1988	.....	KE	V..	Y..	D.A	V..	I	A.S...N..
A/Nanchang/933/1995	.....	KE	V..	Y..	D.A	V..	G..	A.D.T.Y..
A/Wisconsin/67/2005		Q..	V..	Y..	D.A	V..	N	D.S.....
A/Perth/16/2009		Q..	V..	Y..	D.A	V..	N	..S.....
A/Victoria/361/2011		Q..	V..	Y..	D.A	V..	N	..S.....

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A/swine/Gent/172/2008	RGPNN	FFSR	LNWLYKSGNT	YPMLNVTMPN	SDDFDKLYIW	GVHHPSTDRE	QTNLYIQASG	RITVSTKRSQ
A/swine/Gent/1/1984	S	.....	.....	.....	.....N	.....	.....V..	V..F..H
A/swine/England/163266/1987	SDS	.....	.....V..	.....	.....N.N	I..	C..R	ALE..
A/swine/Texas/4199-2/1998	SVK	.....	H..LEYK	.....	.....N.K	.....	.....S..V..I	RV...S
A/swine/Minnesota/593/1999	ESVK	.....	H..LEYK	.....	.....N.K	.....	.....S..V..I	RV...S
A/swine/Ontario/33853/2005	ESV	.....	HNLDYK	.....	.....N.K	.....	.....G..D	RV...S
A/swine/Penn/A01076777/2010	KSV	.....	NLNKY	.....	.....N.N	.....	.....G..KD	RV...S
A/Indiana/08/2011	SV	.....	NLNKY	.....	.....N.K	.....	.....G..KD	RV...S
A/swine/Iowa/A01049750/2011	SV	.....	HNLNKY	.....	.....N.N	.....	.....G..D	RV...S
A/Victoria/3/1975	DIG	.....	.....S	VQ	N.NS	.....	.....K..D	V..
A/England/427/1988	SV	.....	H..EYK	.....	.....NGK	.....	.....VR..	RV...S
A/Nanchang/933/1995	SVK	.....	H..LEYK	.....	.....N.K	.....	.....SD..S	RV...S
A/Wisconsin/67/2005	RS	.....	THLKFK	.....	.....NEK	.....	.....V..ND	R...S
A/Perth/16/2009	RSK		THLNFK		NEQ		L..G..KD	R...S
A/Victoria/361/2011	RS		THLNFK		NEQ		G..KD	R...S

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A/swine/Gent/172/2008	QTIIPNIGSR	PWVRGLSSRI	SIYWTIVKPG	DILIINSNGN	LIAPRGYFKI	QTGKSSVMRS	DAPIGTCNSE
A/swine/Gent/1/1984	V..G	.....	.....	.....V..	M	HN.R..I	S..S
A/swine/England/163266/1987	V..V	.....	.....	.....L..	.....	RA...I..	S..I..
A/swine/Texas/4199-2/1998	V..	I..	.....	.....L..S.T	.....	RN...I..	DN.Y..
A/swine/Minnesota/593/1999	V..	I..	.....	.....L..S.T	.....	RN...I..	DN.Y..
A/swine/Ontario/33853/2005	V..	V..I	.....	.....L..T	.....	S...I..	N..
A/swine/Penn/A01076777/2010	V..	V..I	.....	.....L..T	.....	S...I..	N..K
A/Indiana/08/2011	V..	V..I	.....	.....L..T	.....	S...I..	H.DE
A/swine/Iowa/A01049750/2011	V..	V..V	.....	.....L..T	.....	RN...I..	H.DN
A/Victoria/3/1975	V..	.....	.....	.....V..	M	R...I..	S..
A/England/427/1988	V..	.....	.....	.....L..T	.....	R...I..	S..
A/Nanchang/933/1995	V..	I..	.....	.....L..K.T	.....	RS...I..	N..
A/Wisconsin/67/2005	V..	RI.NIP		L..T		RS...I..	K..
A/Perth/16/2009	VS	R..NIP		L..T		RS...I..	K..
A/Victoria/361/2011	AV.....	RI.NIP		L..T		RS...I..	K..

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A/swine/Gent/172/2008	CITPNGSIPN	DKPFQNVNRI	TYGACPHYIK	QNTLKLATGM	RNIPERQTR
A/swine/Gent/1/1984	V..	K..	K.V	.....	.....K..
A/swine/England/163266/1987	.....	.....K..	K.V	.....	.....K..
A/swine/Texas/4199-2/1998	.....	.....K.V	K..	.....	.....V..K..
A/swine/Minnesota/593/1999	.....	.....K.V	K..	.....	.....V..K..
A/swine/Ontario/33853/2005	.....	.....R.V	.....	.....	.....V..K..
A/swine/Penn/A01076777/2010	.....	.....R.V	.....	.....	.....V..K..
A/Indiana/08/2011	.....	.....K..	R.V	.....	.....V..K..
A/swine/Iowa/A01049750/2011	.....	.....K..	R.V	.....	.....V..K..
A/Victoria/3/1975	.....	.....K..	K.V	.....	.....V..K..
A/England/427/1988	.....	.....V..	R.V	.....	.....V..K..
A/Nanchang/933/1995	.....	.....V..	R.V	.....	.....V..K..
A/Wisconsin/67/2005	.....	.....V..	R.V	.....	.....V..K..
A/Perth/16/2009	.....	.....V..	R.V	.....	.....V..K..
A/Victoria/361/2011	.....	.....V..	R.V	S..	V..K..