

Supplementary Table 1: Primers and probes used for IAV and IBV real-time or conventional RT-PCRs

Assay		Primer/probe	Sequence (5' - 3')	Reference	
Porcine samples	Influenza A(H1N1)pdm09 real-time RT-PCR	FluSw H1 F236	TGG GAA ATC CAG AGT GTG AAT CAC T	43 (Schulze et al., 2010)	29
		FluSw H1 R318	CGT TCC ATT GTC TGA ACT AGR TGT T		
		FluSw H1 TM 292	FAM – CCA CAA TGT AGG ACC ATG AGC TTG CTG T – BHQ1		
	H1N1 and H3N2 subtyping RT-PCRs	H1_550fwd	AAC AAY AAR GRG AAA GAA GT	8 (Chiapponi et al., 2012) (Lee et al., 2001)	
		H1_1016rev	GGG ACD TTY CTT ART CCT GT		
		N1_617fwd	TGA AAT ACA ATG GCA TAA TAA C		
		N1_1130rev	GGA TCC CAA ATC ATC TCA AA		
		H3-175f	CAR ATT GAR GTG ACH AAT GC		
		H3-896r	GGT GCA TCT GAY CTC ATT A		
		N2-575f	GGA AAA GCA TGG CTG CAT		
N2-1365r	GTG CCA CAA AAC ACA ACA AT				
Human samples	Influenza A and B duplex real-time RT-PCR	InfA-CDC For	GAC CRA TCC TGT CAC CTC TGA C	17 (Gonçalves et al., 2016, adapted from CDC protocol 2009)	
		InfA-CDC Rev	AGG GCA TTY TGG ACA AAK CGT CTA		
		InfA Pro CDC	FAM – TGC AGT CCT CGC TCA CTG GGC ACG – BHQ1		
		BcdcFor	TCC TCA AYT CAC TCT TCG AGC G		
		BcdcRev	CGG TGC TCT TGA CCA AAT TGG		
	BcdcPro	YY – CCA ATT CGA GCA GCT GAA ACT GCG GTG – BHQ1			
	Influenza A subtyping and influenza B lineage assessment real-time RT-PCRs	SwiH1 F	GGG TAG CCC CAT TGC ATT T	In house, 2009	
		SwiH1 R	TGG AGA GTG ATT CAC ACT CTG GAT		
		SwiH1Ge P	FAM – AAY ATT GCT GGC TGG ATC CTG GGA – BHQ1		
		N1.3_F	AGR CCT TGY TTC TGG GTT GA	20 (Adapted from Henritzi et al., 2016)	
		N1.3_R	ACC GTC TGG CCA AGA CCA		
		N1.3	ABY – ATY TGG ACY AGC GGG AGC AGC AT – QSY		
		AH3cdcFor	AAG CAT TCC YAA TGA CAA ACC	17 (Gonçalves et al., 2016, adapted from CDC protocol 2007)	
		AH3cdcRev	ATT GCR CCR AAT ATG CCT CTA GT		
		AH3cdcPro	VIC – CAG GAT CAC ATA TGG GSC CTG TCC CAG – BHQ1		
		N2h_542_F	CAA GTT GTC ACG ATG GAA AAG C	In house, 2018	
		N2h_581_R	GCA TTT TTA TCA TCC CCC GTT A		
		N2h_565_P	Cy5 – TGG CTG CAT GTT TG – MGB		
		BHA188Fvic	AAC CAG RGG GAA ACT ATG CC	44 (Adapted from Schweiger et al., 2000)	
		BHA188Fyam	GAC CAG AGG GAA ACT ATG CCC		
		BHAproVic	VIC-CAG ACC AAA ATG CAC GGG GAA HAT ACC-BHQ1		
		BHAproYam	FAM-CAG RCC AAT GTG TGT GGG GAY CAC ACC-BHQ1	52 (Adapted from Watzinger et al., 2004)	
	BHA270Rge	CCC RGA TGT AAC AGG TCT KAC TT			
	RT-PCR and Sanger sequencing of samples suspected to be positive for zoonotic Influenza A	Uni 12 primer (RT only)	AGC AAA AGC AGG	21 (Hoffmann et al., 2001)	
		Ba-PB2-1	TAT TGG TCT CAG GGA GCG AAA GCA GGT C		
		Ba-PB2-2341R	ATA TGG TCT CGT ATT AGT AGA AAC AAG GTC GTT T		
Bm-PB1-1		TAT TCG TCT CAG GGA GCG AAA GCA GGC A			
Bm-PB1-2341R		ATA TCG TCT CGT ATT AGT AGA AAC AAG GCA TTT			
Bm-PA-1		TAT TCG TCT CAG GGA GCG AAA GCA GGT AC			
Bm-PA-2233R		ATA TCG TCT CGT ATT AGT AGA AAC AAG GTA CTT			
Bm-HA-1		TAT TCG TCT CAG GGA GCA AAA GCA GGG G			
Bm-NS-890R		ATA TCG TCT CGT ATT AGT AGA AAC AAG GGT GTT TT			
Bm-NP-1		TAT TCG TCT CAG GGA GCA AAA GCA GGG TA			
Bm-NP-1565R		ATA TCG TCT CGT ATT AGT AGA AAC AAG GGT ATT TTT			



RT-PCR and Sanger sequencing of samples
suspected to be positive for zoonotic
Influenza A: Swine H1 and N1 specific primers

Ba-NA-1
Ba-NA-1413R
Bm-M-1
Bm-M-1027R
Bm-NS-1
Bm-NS-890R

swH1-125F
swH1-1029R
swN1-18F
sN1Rev R1398

TAT TGG TCT CAG GGA GCA AAA GCA GGA GT
ATA TGG TCT CGT ATT AGT AGA AAC AAG GAG TTT TTT
TAT TCG TCT CAG GGA GCA AAA GCA GGT AG
ATA TCG TCT CGT ATT AGT AGA AAC AAG GTA GTT TTT
TAT TCG TCT CAG GGA GCA AAA GCA GGG TG
ATA TCG TCT CGT ATT AGT AGA AAC AAG GGT GTT TT

AGC TGA CAC CAT TTG TGT AGG C
ATG GGA TGT ACR TTC TGA AA
AAA ATG AAT CCA AAT CAG AAG ATA AT
CAT TCA GAC TCT TGT GTT CT

In house, 2010

In house, 2011

BHQ = Black Hole Quencher
HA = hemagglutinin gene
M = matrix gene
NA = neuraminidase gene
NP = nucleoprotein gene
NS = nonstructural gene
PB2, PB1, PA = polymerase genes
YY = Yakima Yellow

Supplementary Table 1: Protocols for IAV and IBV real-time or conventional RT-PCRs

Porcine samples

Swine Influenza A real-time RT-PCR

Adiavet SIV Real Time (Adiagène-BioX Diagnostics)

RT-PCR mix

Reagent	1 reaction
Master Mix	20µl
RNA	5µl

Cycling conditions

Duration	Temperature	Cycles
10 min	45°C	
10 min	95°C	
15 sec	95°C	40
1 min	60°C	

PCR machine

7900HT Fast (Life Technologies) or QuantStudio 7 Flex Real-Time PCR System (Applied Biosystems)

Influenza A(H1N1)pdm09 real-time RT-PCR

QuantiTect Probe RT-PCR Kit (Qiagen)

RT-PCR mix

Reagent	1 reaction
Master Mix (2X)	12.5µl
BSA (1mg/ml)	1µg
Primer Forward	400nM
Primer Reverse	400nM
Probe	200nM
RT Mix	0.5µl
Nuclease-free water	3.5µl
	20µl
RNA	5µl

Cycling conditions

Duration	Temperature	Cycles
30 min	50°C	
15 min	95°C	
15 sec	95°C	40
30 sec	60°C	

PCR machine

7900HT Fast (Life Technologies) or QuantStudio 7 Flex Real-Time PCR System (Applied Biosystems)

H1N1 and H3N2 subtyping RT-PCRs

Qiagen OneStep RT-PCR Kit (Qiagen)

RT-PCR mix

Reagent	1 reaction
RT-PCR Buffer (5X)	5µl
dNTP Mix (10mM)	400nM each
Primer Forward	600nM
Primer Reverse	600nM
RT-PCR Enzyme Mix	1µl
Nuclease-free water	10µl
	20µl
RNA	5µl

Cycling conditions

Duration	Temperature	Cycles
30 min	48°C	
10 min	95°C	
1 min	95°C	40
1 min	50°C	
1 min	72°C	
7 min	72°C	

PCR machine

FlexCycler2 (Analytik Jena)

Human samples

Human samples

Human samplesHuman samples

Human samples

Human samples

Human samples

Human samplesHuman samples

Human samples

Human samples

Human samples

Human samplesHuman samples

Human samples

AmpliTaq DNA Polymerase with Buffer II (Applied Biosystems)																								
PCR mix	<table><tr><th>Reagent</th><th>1 reaction</th></tr><tr><td>GeneAmp PCR buffer II (10X)</td><td>5µl</td></tr><tr><td>Primer Forward</td><td>250nM</td></tr><tr><td>Primer Reverse</td><td>250nM</td></tr><tr><td>dNTP (2.5mM)</td><td>200nM</td></tr><tr><td>Glycerol 10%</td><td>1%</td></tr><tr><td>MgCl2 (25mM)</td><td>1.5mM</td></tr><tr><td>AmpliTaq DNA Polymerase</td><td>1.25µl</td></tr><tr><td>Nuclease-free water</td><td>14.75µl</td></tr><tr><td>cDNA</td><td>5µl</td></tr></table>		Reagent	1 reaction	GeneAmp PCR buffer II (10X)	5µl	Primer Forward	250nM	Primer Reverse	250nM	dNTP (2.5mM)	200nM	Glycerol 10%	1%	MgCl2 (25mM)	1.5mM	AmpliTaq DNA Polymerase	1.25µl	Nuclease-free water	14.75µl	cDNA	5µl		
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PCR machine	SimpliAmp Thermal Cycler (ThermoFisher) or TProfessional SL Basic Thermocycler (Biometra)																							
RT-PCR for swine H1 and N1																								
AmpliTaq DNA Polymerase with Buffer II (Applied Biosystems)																								
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Cycling conditions H1	<table><tr><th>Duration</th><th>Temperature</th><th>Cycles</th></tr><tr><td>4 min</td><td>94°C</td><td rowspan="5">40</td></tr><tr><td>15 sec</td><td>94°C</td></tr><tr><td>30 sec</td><td>50°C</td></tr><tr><td>1 min</td><td>72°C</td></tr><tr><td>5 min</td><td>72°C</td></tr></table>		Duration	Temperature	Cycles	4 min	94°C	40	15 sec	94°C	30 sec	50°C	1 min	72°C	5 min	72°C								
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Cycling conditions N1	<table><tr><th>Duration</th><th>Temperature</th><th>Cycles</th></tr><tr><td>10 min</td><td>94°C</td><td rowspan="10">39</td></tr><tr><td>30 sec</td><td>50°C</td></tr><tr><td>2 min</td><td>72°C</td></tr><tr><td>30 sec</td><td>94°C</td></tr><tr><td>30 sec</td><td>50°C</td></tr><tr><td>2 min</td><td>72°C</td></tr><tr><td>30 sec</td><td>94°C</td></tr><tr><td>30 sec</td><td>50°C</td></tr><tr><td>10 min</td><td>72°C</td></tr></table>		Duration	Temperature	Cycles	10 min	94°C	39	30 sec	50°C	2 min	72°C	30 sec	94°C	30 sec	50°C	2 min	72°C	30 sec	94°C	30 sec	50°C	10 min	72°C
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10 min	72°C																							
PCR machine	SimpliAmp Thermal Cycler (ThermoFisher) or TProfessional SL Basic Thermocycler (Biometra)																							

For the different RT-PCR assays, porcine samples were tested in duplicate, human samples were tested in single approaches. Extracted RNA from positive field samples served as positive controls, nuclease-free water and an extraction control without sample RNA served as negative controls.

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 1.10	1.2.2010	Schleitheim	8226	Schaffhausen	N1				
SIV 2.10							SIV_02_10_N1		PQ663565
SIV 3.10									
SIV 4.10	1.12.2010	Schleitheim	8226	Schaffhausen	H1N1				
SIV 5.10						SIV_05_10_H1		PQ663326	
SIV 6.10									
SIV 11.10	1.18.2010	Schleitheim	8226	Schaffhausen	H1N1	SIV_11_10_H1		PQ663325	
SIV 13.10									
SIV 14.10									
SIV 15.10	1.21.2010								
SIV 16.10									
SIV 17.10									
SIV 18.10	2.3.2010	Nottwil	6207	Luzern	H1N1	SIV_18_10_H1	SIV_18_10_N1	PQ663332	PQ663584
SIV 19.10									
SIV 20.10									
SIV 21.10	2.3.2010	Widnau	9443	St. Gallen	N1				
SIV 22.10									
SIV 27.10									
SIV 29.10	2.12.2010	Emmen	6032	Luzern	H1N1				
SIV 30.10									
SIV 32.10									
SIV 33.10	2.15.2010	Hedingen	8908	Zürich					
SIV 35.10									
SIV 37.10									
SIV 38.10	3.11.2010	Gränichen	5722	Aargau	H1N1	SIV_38_10_H1	SIV_38_10_N1	PQ663348	PQ663563
SIV 39.10									
SIV 40.10									
SIV 41.10	3.16.2010	Oberwil		Zürich	H1N1	SIV_41_10_H1	SIV_41_10_N1	PQ663350	PQ663558
SIV 42.10									
SIV 45.10									
SIV 46.10	3.19.2010	Fenkrieden	5645	Aargau	H1N1	SIV_45_10_H1		PQ663349	
SIV 47.10									
SIV 48.10						SIV_48_10_H1		PQ663341	
SIV 52.10	4.27.2010	Massonnens	1692	Fribourg	H1N1				
SIV 53.10									
SIV 54.10									
SIV 58.10	4.30.2010	Luzern		Luzern					
SIV 59.10									
SIV 60.10									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 73.10	5.21.2010	Oberriet	9463	St. Gallen	H1N1		SIV_73_10_N1		PQ663564
SIV 74.10						SIV_74_10_H1		PQ663342	
SIV 75.10									
SIV 76.10	5.26.2010	Ueberstorf	3182	Fribourg	H1N1				
SIV 77.10									
SIV 78.10									
SIV 79.10	5.26.2010	Nesslau	9650	St. Gallen					
SIV 80.10									
SIV 81.10									
SIV 94.10	6.10.2010	Schnottwil	3253	Solothurn	N1				
SIV 95.10									
SIV 96.10									
SIV 100.10	7.8.2010	Oberkirch	6208	Luzern	N1				
SIV 101.10									
SIV 102.10									
SIV 106.10	7.19.2010	Hinwil	8340	Zürich	N1				
SIV 107.10									
SIV 108.10									
SIV 109.10	7.19.2010	Hinwil	8340	Zürich	N1				
SIV 110.10									
SIV 111.10									
SIV 112.10	7.20.2010	Densbüren	5026	Aargau	H1N1				
SIV 113.10									
SIV 114.10									
SIV 121.10	8.27.2010	Chevenez	2906	Jura	H1N1				
SIV 123.10						SIV_123_10_H1	SIV_123_10_N1	PQ663343	PQ663577
SIV 124.10									
SIV 125.10	8.31.2010	Dietfurt	9615	St. Gallen					
SIV 126.10									
SIV 127.10									
SIV 127.10	2.1.2010	Hohentannen	9216	Thurgau	N1		SIV_127_10_N1		PQ663585
SIV 128.10	9.7.2010	Matzingen	9548	Thurgau					
SIV 129.10									
SIV 130.10									
SIV 141.10	9.24.2010	Hünenberg	6331	Zug					
SIV 147.10	10.6.2010	Sempach	6204	Luzern	H1N1				
SIV 148.10									
SIV 149.10									
SIV 156.10	10.21.2010	Mühlau	5642	Aargau	H1N1				
SIV 157.10									
SIV 158.10									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 159.10	10.28.2010	Nottwil	6207	Luzern	H1N1				
SIV 160.10									
SIV 163.10	10.29.2010	Rossrüti	9512	St. Gallen	H1				
SIV 164.10									
SIV 168.10	11.3.2010	Muri	5630	Aargau	H1N1				
SIV 169.10									
SIV 170.10									
SIV 172.10	11.4.2010	Gächlingen	8214	Schaffhausen	H1				
SIV 173.10									
SIV 175.10	11.5.2010	Knutwil	6213	Luzern	H1				
SIV 178.10	11.5.2010	Gollion	1124	Waadt	N1				
SIV 182.10	11.8.2010	Obergoldbach	3434	Bern	N1				
SIV 183.10									
SIV 184.10									
SIV 187.10	11.9.2010	Stettlen	3066	Bern	H1				
SIV 195.10	11.11.2010	Bärau	3552	Bern					
SIV 198.10	11.11.2010	Schönholzerswilen	8577	Thurgau	H1				
SIV 199.10									
SIV 202.10	11.19.2010	Hellbühl	6016	Luzern	H1N1				
SIV 204.10	11.22.2010	Vuiteboef	1445	Waadt	H1				
SIV 206.10	11.22.2010	Muolen	9313	St. Gallen	H1N1				
SIV 207.10									
SIV 208.10									
SIV 210.10	11.23.2010			Thurgau	H1				
SIV 211.10									
SIV 214.10	11.24.2010	Ettenhausen	8356	Thurgau					
SIV 216.10	11.25.2010	Stettlen	3066	Bern					
SIV 217.10									
SIV 218.10									
SIV 222.10	12.1.2010	Sempach	6204	Luzern	H1				
SIV 229.10	12.2.2010	Wängi	9545	Thurgau	H1				
SIV 230.10	11.23.2010	Frittschen	9504	Thurgau					
SIV 231.10									
SIV 233.10	12.2.2010	Bissegg	8514	Thurgau					
SIV 237.10	12.24.2010	Kirchdorf	3116	Bern					
SIV 238.10									
SIV 1.11	1.6.2011	Illighausen	8574	Thurgau	H1N1				
SIV 2.11									
SIV 5.11	11.01.2011	Hüttwilen	8536	Thurgau	N1				
SIV 7.11	1.12.2011	Wildhaus	9658	St. Gallen	(H1N1)pdm09				
SIV 9.11									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 10.11	1.14.2011	Hüttwilen	8536	Thurgau	N1				
SIV 11.11									
SIV 13.11									
SIV 14.11	1.18.2011	Blumenstein	3638	Bern	(H1N1)pdm09				
SIV 15.11									
SIV 20.11	1.25.2011	Stein am Rhein	8260	Thurgau					
SIV 23.11	1.26.2011	Buttwil	5632	Aargau	H1N1				
SIV 24.11									
SIV 25.11									
SIV 26.11	1.26.2011	Hauptwil	9213	Thurgau	H1N1				
SIV 27.11									
SIV 28.11	2.1.2011	Apples	1143	Waadt					
SIV 30.11									
SIV 31.11									
SIV 32.11	2.10.2011	Bigenthal	3512	Bern	(H1N1)pdm09				
SIV 33.11									
SIV 36.11	2.14.2011	Pfyn	8505	Thurgau					
SIV 37.11	2.28.2011	Widnau	9443	St. Gallen					
SIV 47.11	3.8.2011	Brittnau	4805	Aargau	N1				
SIV 48.11									
SIV 59.11	4.6.2011	Dierikon	6036	Luzern	H1N1				
SIV 60.11									
SIV 61.11									
SIV 62.11	4.12.2011	Märwil	9562	Thurgau	H1N1				
SIV 63.11									
SIV 64.11									
SIV 67.11	4.14.2011	Matzingen	9548	Thurgau	N1				
SIV 68.11	4.15.2011	Dietwil	6042	Aargau	H1N1				
SIV 69.11									
SIV 70.11									
SIV 95.11	6.15.2011	Kreuzlingen	8280	Thurgau	H1N1				
SIV 96.11									
SIV 97.11									
SIV 103.11	7.19.2011	Oerlingen	8461	Zürich	N1		SIV_104_11_N1		PQ663578
SIV 104.11									
SIV 113.11	8.17.2011	Kirchdorf	3116	Bern	(H1N1)pdm09				
SIV 114.11									
SIV 115.11									
SIV 125.11	9.19.2011	Lengwil	8574	Thurgau	H1N1	SIV_125_11_H1	SIV_125_11_N1	PQ663345	PQ663580
SIV 126.11									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 138.11	10.5.2011	Merenschwand	5634	Aargau	N1				
SIV 140.11	10.10.2011	Gampelen	3236	Bern	N1				
SIV 141.11							SIV_141_11_N1		PQ663582
SIV 142.11									
SIV 143.11	10.13.2011	Aettenschwil	5645	Aargau	N1				
SIV 144.11									
SIV 145.11									
SIV 146.11	10.22.2011	Lichtensteig	9620	St. Gallen	N1				
SIV 147.11									
SIV 148.11									
SIV 154.11	11.1.2011	Grosswangen	6022	Luzern	N1				
SIV 159.11	11.4.2011	Kleindietwil	4936	Bern	N1				
SIV 160.11									
SIV 161.11									
SIV 162.11	11.8.2011	Lütisburg	9604	St. Gallen	N1				
SIV 163.11									
SIV 164.11									
SIV 166.11	11.10.2011	Turbenthal	8488	Zürich	N1				
SIV 167.11							SIV_167_11_N1		PQ663579
SIV 176.11									
SIV 177.11	11.24.2011	Beinwil	5637	Aargau	H1N1				
SIV 178.11						SIV_178_11_H1	SIV_178_11_N1	PQ663340	PQ663571
SIV 179.11									
SIV 181.11	11.25.2011	Schnottwil	3253	Solothurn	H1N1	SIV_181_11_H1	SIV_181_11_N1	PQ663328	PQ663566
SIV 191.11							SIV_191_11_N1		PQ663572
SIV 192.11						SIV_192_11_H1	NA	PQ663337	
SIV 193.11	12.2.2011	Walterswil	4942	Bern	H1N1		SIV_193_11_N1		PQ663570
SIV 194.11									
SIV 196.11							SIV_196_11_N1		PQ663575
SIV 197.11	12.2.2011	Ettenhausen	4553	Thurgau	N1				
SIV 198.11							SIV_198_11_N1		PQ663562
SIV 199.11									
SIV 201.11	12.14.2011	Schleitheim	8226	Schaffhausen	H1N1				
SIV 202.11						SIV_202_11_H1		PQ663344	
SIV 203.11									
SIV 204.11	12.14.2011	Rapperswil	3255	Bern	H1N1				
SIV 205.11									
SIV 7.12	1.6.2012			Bern	H1N1				
SIV 31.12	1.31.2012	Lanzenhäusern	3148	Bern	H1N1	SIV_31_12_H1	SIV_31_12_N1	PQ663339	PQ663583
SIV 32.12									
SIV 33.12									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 40.12	2.13.2012	Kirchdorf	3116	Bern	N1		SIV_40_12_N1		PQ663576
SIV 43.12	2.15.2012	Worben	3252	Worben					
SIV 62.12	4.4.2012	Hedingen	8908	Zürich	N1				
SIV 73.12	5.4.2012	Ebersecken	6245	Luzern	H1N1				
SIV 74.12						SIV_74_12_H1	SIV_74_12_N1	PQ663338	PQ663569
SIV 75.12									
SIV 76.12	5.10.2012	Zuzwil	3303	Bern					
SIV 77.12									
SIV 78.12									
SIV 88.12	6.12.2012	Wängi	9545	Thurgau					
SIV 89.12									
SIV 90.12									
SIV 96.12	7.24.2012	Grafenried	3308	Bern	N1	SIV_96_12_H1		PQ663347	
SIV 97.12							SIV_97_12_N1		PQ663574
SIV 104.12	8.20.2012	Sempach	6204	Luzern	H1N1				
SIV 105.12									
SIV 106.12									
SIV 115.12	12.09.2012	Malters	6102	Luzern	N1				
SIV 124.12	9.26.2012	Sempach	6204	Luzern					
SIV 125.12									
SIV 126.12									
SIV 130.12	01.10.2012	Rosshäusern	3204	Bern					
SIV 149.12	11.9.2012	Neudorf	6025	Luzern	H1N1				
SIV 155.12	11.23.2012	Les Reussilles	2722	Bern	H1N1				
SIV 156.12									
SIV 157.12									
SIV 159.12	11.23.2012	Orbe	1350	Waadt	H1N1				
SIV 164.12	12.21.2012	Grandfontaine	2908	Jura	H1N1				
SIV 9.13	1.30.2013	Mariastein	4115	Solothurn	H1N1				
SIV 10.13									
SIV 11.13									
SIV 12.13	2.7.2013	Kiesen	3625	Bern	H1N1				
SIV 13.13									
SIV 18.13									
SIV 20.13	2.26.2013	Grafenried	3308	Bern					
SIV 23.13	3.5.2013	Rümlingen	4444	Baselland	(H1N1)pdm09				
SIV 24.13	3.7.2013	Hedingen	8908	Zürich	H1N1				
SIV 25.13									
SIV 26.13									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 27.13	3.12.2013	Schleitheim	8226	Schaffhausen	H1N1				
SIV 28.13									
SIV 29.13									
SIV 35.13	4.8.2013	Roggliwil	6265	Luzern	H1N1				
SIV 36.13									
SIV 37.13									
SIV 38.13	4.10.2013	Schnottwil	3253	Solothurn	N1				
SIV 39.13									
SIV 41.13	4.23.2013	Eschenbach	6274	Luzern	H1N1				
SIV 42.13									
SIV 43.13									
SIV 44.13	5.7.2013	Ruswil	6017	Luzern	H1N1				
SIV 45.13									
SIV 46.13									
SIV 47.13	5.27.2013	Winterthur	8409	Zürich	H1N1				
SIV 48.13									
SIV 49.13	5.30.2013	Oerlingen	8461	Zürich	N1				
SIV 50.13									
SIV 51.13									
SIV 52.13	5.31.2013	Münchenbuchsee	3053	Bern	N1				
SIV 53.13									
SIV 54.13									
SIV 55.13	6.4.2013	Benken	8717	St. Gallen	H1N1				
SIV 56.13									
SIV 57.13									
SIV 59.13	6.10.2013	Noflen	3116	Bern	(H1N1)pdm09				
SIV 62.13	6.20.2013	Detligen	3036	Bern	N1		SIV_62_13_N1		PQ663581
SIV 71.13	7.1.2013	Haag	9469	St. Gallen					
SIV 73.13	7.24.2013	Chevenez	2906	Jura	(H1N1)pdm09				
SIV 74.13									
SIV 75.13						SIV_75_13_H1		PQ663270	
SIV 76.13	8.7.2013	Wilihof	6236	Luzern	H1N1	SIV_76_13_H1		PQ663313	
SIV 77.13									
SIV 80.13	8.7.2013	Fischbach	6145	Luzern					
SIV 82.13	8.13.2013	Affoltern i. E.	3416	Bern	H1N1				
SIV 83.13									
SIV 84.13									
SIV 85.13	8.16.2013	Dietwil	6042	Aargau	H1N1	SIV_85_13_H1		PQ663334	
SIV 86.13									
SIV 87.13									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 91.13	9.30.2013	Eich	6205	Luzern					
SIV 92.13									
SIV 93.13									
SIV 94.13	9.30.2013	Lützelflüh	3432	Bern					
SIV 95.13									
SIV 97.13	10.1.2013	Ettenhausen	8356	Thurgau	N1				
SIV 98.13									
SIV 101.13	10.4.2013	Zürich	8057	Zürich					
SIV 107.13	10.8.2013	Nottwil	6207	Luzern	N1				
SIV 108.13									
SIV 109.13									
SIV 110.13	10.9.2013	Bischofszell	9220	Thurgau	H1N1				
SIV 111.13						SIV_111_13_H1		PQ663272	
SIV 115.13	10.28.2013	Sempach	6204	Luzern	N1				
SIV 116.13									
SIV 117.13									
SIV 118.13	10.29.2013	Ettiswil	6218	Luzern	H1N1				
SIV 119.13									
SIV 120.13						SIV_120_13_H1		PQ663322	
SIV 126.13	11.12.2013	Eschenbach	6274	Luzern					
SIV 127.13									
SIV 128.13									
SIV 129.13	11.13.2013	Ruswil	6017	Luzern	H1N1	SIV_129_13_H1		PQ663305	
SIV 130.13									
SIV 131.13									
SIV 134.13	11.15.2013	Waldkirch	9205	St. Gallen					
SIV 135.13	11.20.2013	Graben	3376	Bern	H1	SIV_135_13_H1		PQ663316	
SIV 136.13									
SIV 137.13									
SIV 138.13	11.22.2013	La Chaux	1308	Waadt	H1N1				
SIV 139.13									
SIV 140.13						SIV_140_13_H1		PQ663296	
SIV 141.13	11.26.2013	Rickenbach	6221	Luzern	H1N1				
SIV 142.13						SIV_142_13_H1		PQ663318	
SIV 143.13									
SIV 144.13	11.28.2013	Suberg	3262	Bern	N1				
SIV 146.13									
SIV 150.13	12.6.2013	Aettenschwil	5645	Aargau	H1N1				
SIV 151.13						SIV_151_13_H1		PQ663275	
SIV 152.13									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 153.13	12.6.2013	Messen	3254	Solothurn	H1N1	SIV_153_13_H1		PQ663310	
SIV 154.13						SIV_154_13_H1		PQ663311	
SIV 155.13									
SIV 156.13	12.9.2013	Hüswil	6152	Luzern	H1				
SIV 157.13						SIV_157_13_H1		PQ663324	
SIV 158.13						SIV_158_13_H1		PQ663319	
SIV 159.13	12.9.2013	Ruswil	6017	Luzern	H1	SIV_159_13_H1		PQ663321	
SIV 160.13									
SIV 175.13						SIV_175_13_H1		PQ663312	
SIV 176.13	12.16.2013	Wyssachen	4954	Bern	H1N1				
SIV 177.13									
SIV 181.13									
SIV 182.13	12.20.2013	Bärau	3552	Bern	H1N1				
SIV 183.13						SIV_183_13_H1		PQ663323	
SIV 184.13									
SIV 185.13	12.24.2013			Bern					
SIV 186.13									
SIV 4.14									
SIV 5.14	1.9.2014	Kirchlindach	3038	Bern	H1N1	SIV_05_14_H1	SIV_05_14_N1	PQ663317	PQ663546
SIV 6.14									
SIV 7.14						SIV_07_14_H1	SIV_07_14_N1	PQ663315	PQ663547
SIV 8.14	1.10.2014	Grünenmatt	3452	Bern	H1N1				
SIV 9.14									
SIV 13.14									
SIV 14.14	1.22.2014	Signau	3534	Bern	H1N1		SIV_14_14_N1		PQ663537
SIV 15.14									
SIV 23.14									
SIV 24.14	2.12.2014	Willisau	6130	Luzern	H1N1	SIV_24_14_H1	SIV_24_14_N1	PQ663320	PQ663532
SIV 25.14									
SIV 29.14									
SIV 31.14	2.24.2014	Wiliberg	5058	Aargau	H1N1				
SIV 32.14									
SIV 33.14									
SIV 34.14	2.26.2014	Meierskappel	6344	Luzern	H1N1				
SIV 60.14									
SIV 61.14									
SIV 62.14	4.15.2014	Landiswil	3434	Bern	H1N1				
SIV 63.14						SIV_63_14_H1	SIV_63_14_N1	PQ663309	PQ663545
SIV 64.14									
SIV 65.14	4.17.2014	Affoltern i. E.	3416	Bern	H1N1				
SIV 66.14						SIV_66_14_H1	SIV_66_14_N1	PQ663288	PQ663541

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 70.14	5.7.2014	Stein	9063	Appenzell Ausserrhoden	N1				
SIV 71.14									
SIV 72.14									
SIV 80.14	5.15.2014	Ruswil	6017	Luzern					
SIV 88.14	6.18.2014			Luzern	H1N1				
SIV 89.14									
SIV 90.14									
SIV 100.14	7.15.2014	Sorens	1642	Fribourg	H1N1	SIV_100_14_H1		PQ663308	
SIV 101.14									
SIV 102.14									
SIV 118.14	9.17.2014	Siblingen	8225	Schaffhausen	H1N1				
SIV 119.14									
SIV 120.14						SIV_120_14_H1		PQ663333	
SIV 125.14	10.13.2014	Wetzikon	8512	Zürich	N1				
SIV 127.14	10.17.2014	Raperswil	8558	Thurgau	H1N1	SIV_127_14_H1		PQ663331	
SIV 128.14									
SIV 129.14									
SIV 130.14	10.27.2014	Schleitheim	8226	Schaffhausen	H1N1	SIV_130_14_H1		PQ663329	
SIV 131.14									
SIV 132.14									
SIV 139.14	10.29.2014	Eschenbach	6274	Luzern	H1N1	SIV_139_14_H1		PQ663304	
SIV 141.14									
SIV 142.14									
SIV 143.14	11.7.2014	Lengwil	8574	Thurgau	H1N1				
SIV 144.14						SIV_144_14_H1		PQ663292	
SIV 145.14									
SIV 146.14									
SIV 148.14	11.11.2014	Schleitheim	8226	Schaffhausen	H1N1	SIV_148_14_H1		PQ663330	
SIV 149.14									
SIV 157.14	12.4.2014	Mosen	6295	Luzern					
SIV 158.14									
SIV 159.14									
SIV 160.14	12.9.2014	Grandfontaine	2908	Jura					
SIV 161.14									
SIV 162.14									
SIV 163.14	12.12.2014			Bern	H1				
SIV 164.14									
SIV 165.14									
SIV 166.14	12.17.2014	Ballwil	6275	Luzern					
SIV 167.14									
SIV 168.14									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 2.15	1.7.2015	Willisau	6130	Luzern	H1N1	SIV_2_15_H1	SIV_2_15_N1	PQ663300	PQ663552
SIV 3.15	1.12.2015	Hessigkofen	4577	Solothurn	H1N1	SIV_3_15_H1	SIV_3_15_N1	PQ663299	PQ663528
SIV 5.15	1.21.2015	Brütten	8311	Zürich	H1N1	SIV_5_15_H1	NA	PQ663302	
SIV 6.15						SIV_6_15_H1	SIV_6_15_N1	PQ663301	PQ663553
SIV 7.15	1.30.2015	Herdern	8535	Thurgau	N1				
SIV 8.15									
SIV 11.15	2.24.2015	Kreuzlingen	8280	Thurgau	H1N1	SIV_11_15_H1	SIV_11_15_N1	PQ663367	PQ663422
SIV 12.15									
SIV 13.15	2.24.2015	Nottwil	6207	Luzern	H1N1				
SIV 14.15						SIV_14_15_H1	SIV_14_15_N1	PQ663295	PQ663531
SIV 21.15	3.25.2015	Grossdietwil	6146	Luzern	H1N1				
SIV 22.15									
SIV 25.15	4.1.2015	Muolen	9313	St. Gallen	H1N1				
SIV 26.15									
SIV 29.15	5.5.2015	Illnau	8308	Zürich	N1		SIV_29_15_N1		PQ663421
SIV 37.15	5.20.2015	Uettligen	3043	Bern	H1N1				
SIV 38.15									
SIV 39.15	6.10.2015	Inwil	6034	Luzern	H1N1	SIV_39_15_H1		PQ663303	
SIV 43.15	7.8.2015	Gossau	9200	St. Gallen	H1	SIV_43_15_H1		PQ663363	
SIV 45.15	7.31.2015	Kräiligen	3315	Bern					
SIV 46.15	8.12.2015	Münchenbuchsee	3053	Bern	H1N1	SIV_46_15_H1	SIV_46_15_N1	PQ663289	PQ663536
SIV 48.15	8.19.2015	Oberdorf	4515	Solothurn					
SIV 49.15									
SIV 50.15	8.19.2015	Oberdorf	4515	Solothurn					
SIV 55.15	9.14.2015	Hitzkirch	6285	Luzern	H1N1	SIV_55_15_H1	SIV_55_15_N1	PQ663293	PQ663542
SIV 56.15						SIV_56_15_H1	SIV_56_15_N1	PQ663294	PQ663543
SIV 57.15	9.18.2015	Hasle-Rüegsau	3415	Bern	H1N1	SIV_57_15_H1	SIV_57_15_N1	PQ663285	PQ663551
SIV 58.15						SIV_58_15_H1	SIV_58_15_N1	PQ663286	PQ663550
SIV 60.15	9.18.2015	Ballwil	6275	Luzern	H1N1	SIV_60_15_H1	SIV_60_15_N1	PQ663278	PQ663539
SIV 64.15	10.7.2015	Bischofszell	9220	Thurgau	H1N1	SIV_64_15_H1	SIV_64_15_N1	PQ663307	PQ663535
SIV 65.15						SIV_65_15_H1	SIV_65_15_N1	PQ663306	PQ663534
SIV 66.15	10.15.2015	Kaltbach	6212	Luzern	H1N1		SIV_66_15_N1		PQ663540
SIV 77.15	10.23.2015	Neuenkirch	6206	Luzern	H1		SIV_77_15_N1		PQ663525
SIV 79.15	11.10.2015	Heilenried	1714	Fribourg	H1	SIV_79_15_H1		PQ663279	
SIV 88.15	11.24.2015	Hessigkofen	4577	Solothurn	H1	SIV_88_15_H1	SIV_88_15_N1	PQ663274	PQ663561
SIV 89.15						SIV_89_15_H1	NA	PQ663327	
SIV 91.15	11.25.2015	Eggiwil	3537	Bern	H1	SIV_91_15_H1	NA	PQ663280	
SIV 92.15						SIV_92_15_H1	NA	PQ663281	
SIV 97.15	12.4.2015	Fenkrieden	5645	Aargau	H1N1	SIV_97_15_H1	SIV_97_15_N1	PQ663364	PQ663463
SIV 98.15						SIV_98_15_H1	SIV_98_15_N1	PQ663365	PQ663464

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 99.15	12.16.2015	Ruswil	6017	Luzern	H1N1		SIV_99_15_N1		PQ663452
SIV 100.15							SIV_100_15_N1		PQ663448
SIV 5.16	1.25.2016	Neudorf	6025	Luzern	H1				
SIV 6.16	1.27.2016	Oberkirch	6208	Luzern	H1N1		SIV_6_16_N1		PQ663548
SIV 8.16	1.27.2016	Sempach	6204	Luzern	H1N1		SIV_8_16_N1		PQ663549
SIV 9.16							SIV_9_16_N1		PQ663544
SIV 13.16	2.2.2016			Bern	H1N1				
SIV 14.16	2.3.2016	Oberhof	5062	Aargau	H1				
SIV 16.16	2.5.2016	Bern	3019	Bern	H1				
SIV 22.16	2.17.2016	Sempach	6204	Luzern	H1N1				
SIV 23.16									
SIV 30.16	3.2.2016	Hellbühl	6016	Luzern	N1				
SIV 32.16	3.9.2016	Römerswil	6027	Luzern	H1N1				
SIV 33.16					H1				
SIV 40.16	3.21.2016	Willisau	6130	Luzern	H1				
SIV 42.16	3.23.2016	Willisau	6130	Luzern	H1				
SIV 47.16	4.19.2016	Affoltern i. E.	3416	Bern	N1				
SIV 48.16					H1N1		SIV_48_16_N1		PQ663467
SIV 50.16	5.13.2016	Affoltern i. E.	3416	Bern	H1N1	SIV_50_16_H1	SIV_50_16_N1	PQ663362	PQ663466
SIV 52.16	5.27.2016			Luzern	H1N1	SIV_52_16_H1	SIV_52_16_N1	PQ663358	PQ663440
SIV 53.16	6.6.2016	Ebersecken	6245	Luzern	H1N1				
SIV 54.16					H1				
SIV 56.16	6.7.2016	Hellbühl	6016	Luzern	H1				
SIV 65.16	6.22.2016	Ruswil	6017	Luzern	N1				
SIV 71.16	8.17.2016	Eggiwil	3537	Bern	H1N1	SIV_71_16_H1	SIV_71_16_N1	PQ663352	PQ663453
SIV 72.16	8.29.2016	Nottwil	6207	Luzern	N1		SIV_72_16_N1		PQ663402
SIV 84.16	10.13.2016	Ruswil	6017	Luzern	N1				
SIV 85.16					H1N1	SIV_85_16_H1	SIV_85_16_N1	PQ663287	PQ663523
SIV 87.16	10.14.2016	Hugelshofen	8565	Thurgau	H1N1		SIV_87_16_N1		PQ663533
SIV 90.16	10.24.2016	Ruswil	6017	Luzern	N1		SIV_90_16_N1		PQ663538
SIV 91.16							SIV_91_16_N1		PQ663515
SIV 94.16	10.27.2016	Büron	6233	Luzern	H1N1		SIV_94_16_N1		PQ663556
SIV 95.16					N1		SIV_95_16_N1		PQ663557
SIV 96.16	10.28.2016	Kaltbach	6212	Luzern	N1		SIV_96_16_N1		PQ663441
SIV 97.16					H1				
SIV 98.16	11.4.2016	Lütisburg	9604	St. Gallen	H1N1				
SIV 99.16					H1				
SIV 101.16	11.8.2016	Affoltern i. E.	3416	Bern	H1N1				
SIV 102.16	11.9.2016	Neudorf	6025	Luzern	H1				
SIV 103.16									

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 108.16	11.17.2016	Bärau	3552	Bern	H1N1				
SIV 109.16							SIV_109_16_N1		PQ663413
SIV 118.16	11.29.2016	Römerswil	6027	Luzern	H1N1	SIV_118_16_H1	SIV_118_16_N1	PQ663351	PQ663457
SIV 119.16						SIV_119_16_H1	SIV_119_16_N1	PQ663368	PQ663458
SIV 128.16	12.8.2016	Gurzelen	3663	Bern	N1		SIV_128_16_N1		PQ663516
SIV 132.16	12.21.2016	Muri	5630	Aargau	H1				
SIV 133.16					H1N1		SIV_133_16_N1		PQ663559
SIV 134.16	12.22.2016	Nierlets-les-Bois	1772	Fribourg	N1		SIV_134_16_N1		PQ663560
SIV 138.16	12.27.2016	Kirchdorf	3116	Bern	H1				
SIV 139.16									
SIV 140.16	12.28.2016	Kreuzlingen	8280	Thurgau	H1				
SIV 141.16					H1N1		SIV_141_16_N1		PQ663401
SIV 142.16	12.28.2016	Sins	5643	Aargau	H1N1		SIV_142_16_N1		PQ663456
SIV 143.16							SIV_143_16_N1		PQ663399
SIV 1.17	1.3.2017	Unterlindig	6206	Luzern	N1				
SIV 2.17					H1N1	SIV_2_17_H1	SIV_2_17_N1	PQ663396	PQ663462
SIV 4.17	1.3.2017	Hinterbrugg	6203	Luzern	H1N1	SIV_4_17_H1	SIV_4_17_N1	PQ663388	PQ663465
SIV 5.17		Marbach	6196	Luzern	H1N1		SIV_5_17_N1		PQ663481
SIV 6.17							SIV_6_17_N1		PQ663459
SIV 7.17		Seelisberg	6377	Uri	H1N1	SIV_7_17_H1	SIV_7_17_N1	PQ663384	PQ663522
SIV 8.17						SIV_8_17_H1	SIV_8_17_N1	PQ663383	PQ663519
SIV 9.17		Muolen	9313	St. Gallen	H1N1		SIV_9_17_N1		PQ663526
SIV 10.17							SIV_10_17_N1		PQ663527
SIV 11.17		Haslen	9054	Appenzell Innerrhoden	H1N1	SIV_11_17_H1	SIV_11_17_N1	PQ663371	PQ663460
SIV 15.17		Appenzell	9050	Appenzell Innerrhoden	H1N1	SIV_16_21_H1	SIV_16_21_N1	PQ663385	PQ663427
SIV 16.17							SIV_17_17_N1		PQ663468
SIV 17.17				Luzern	H1N1				
SIV 18.17									
SIV 21.17		Ruswil	6017	Luzern	H1N1		SIV_21_17_N1		PQ663461
SIV 28.17		Affoltern i. E.	3416	Bern	H1	SIV_28_17_H1	NA	PQ663377	
SIV 29.17					H1N1	SIV_29_17_H1	SIV_29_17_N1	PQ663376	PQ663450
SIV 31.17		Dozwil	8582	Thurgau	H1N1	SIV_31_17_H1	SIV_31_17_N1	PQ663298	PQ663451
SIV 32.17						SIV_32_17_H1	SIV_32_17_N1	PQ663297	PQ663447
SIV 36.17		Dozwil	8582	Thurgau	N1				
SIV 52.17		Le Crêt-près-Semsalet	1611	Fribourg	H1N1	SIV_52_17_H1	SIV_52_17_N1	PQ663290	PQ663455
SIV 53.17						SIV_53_17_H1	SIV_53_17_N1	PQ663291	PQ663454
SIV 57.17		Willisau	6130	Luzern	N1				
SIV 61.17		Hildisrieden	6024	Luzern	H1N1		SIV_61_17_N1		PQ663472
SIV 62.17							SIV_62_17_N1		PQ663469

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 66.17		Hildisrieden	6024	Luzern	H1N1		SIV_66_17_N1		PQ663473
SIV 67.17						SIV_67_17_H1	SIV_67_17_N1	PQ663392	PQ663442
SIV 68.17						SIV_68_17_H1	SIV_68_17_N1	PQ663393	PQ663470
SIV 69.17						SIV_69_17_H1	SIV_69_17_N1	PQ663394	PQ663471
SIV 70.17					N1				
SIV 71.17				Thurgau	N1				
SIV 72.17					H1N1	SIV_72_17_H1	SIV_72_17_N1	PQ663366	PQ663414
SIV 88.17		Neuenkirch	6206	Luzern	N1		SIV_88_17_N1		PQ663446
SIV 89.17						SIV_90_17_H1	SIV_90_17_N1	PQ663283	PQ663529
SIV 90.17		Märwil	9562	Thurgau	H1N1	SIV_91_17_H1	SIV_91_17_N1	PQ663284	PQ663530
SIV 91.17									
SIV 101.17		Ruswil	6017	Luzern	N1		SIV_101_17_N1		PQ663438
SIV 102.17							SIV_102_17_N1		PQ663511
SIV 105.17		Salez	9465	St. Gallen	H1N1	SIV_105_17_H1	SIV_105_17_N1	PQ663391	PQ663445
SIV 106.17						SIV_106_17_H1	SIV_106_17_N1	PQ663390	PQ663508
SIV 109.17		Knouau	8934	Zürich	N1				
SIV 112.17		Hämikon	6289	Luzern	H1N1				
SIV 113.17									
SIV 114.17		Hombrechtikon	8634	Zürich	N1				
SIV 116.17		Ramsen	8262	Schaffhausen	H1N1				
SIV 118.17		Nebikon	6244	Luzern	H1N1				
SIV 123.17		Escholz matt	6182	Luzern	N1				
SIV 129.17		Subigen	4553	Solothurn	N1				
SIV 132.17		Waldkirch	9205	St. Gallen	H1N1				
SIV 133.17									
SIV 134.17		Hefenhofen	8580	St. Gallen	N1		SIV_134_17_N1		PQ663490
SIV 142.17		Inwil	6034	Luzern	N1		SIV_142_17_N1		PQ663502
SIV 144.17		Goldach	9403	St. Gallen	H1N1		SIV_144_17_N1		PQ663411
SIV 146.17		Inwil	6034	Luzern	N1		SIV_146_17_N1		PQ663475
SIV 147.17							SIV_147_17_N1		PQ663503
SIV 149.17		Ruswil	6017	Luzern	N1		SIV_149_17_N1		PQ663507
SIV 150.17		Wald-Schönengrund	9105	St. Gallen	N1		SIV_150_17_N1		PQ663518
SIV 151.17					H1N1	SIV_151_17_H1	SIV_151_17_N1	PQ663276	PQ663517
SIV 156.17					H1N1	SIV_156_17_H1	SIV_156_17_N1	PQ663398	PQ663480
SIV 157.17		Ettiswil	6218	Luzern	H1N1	SIV_157_17_H1	SIV_157_17_N1	PQ663397	PQ663510
SIV 162.17						SIV_162_17_H1	SIV_162_17_N1	PQ663395	PQ663491
SIV 163.17							SIV_163_17_N1		PQ663497
SIV 164.17		Kottwil	6217	Luzern	H1N1	SIV_164_17_H1	SIV_164_17_N1	PQ663382	PQ663509
SIV 169.17		Buch b. Frauenfeld	8524	Thurgau	H1N1		SIV_169_17_N1		PQ663408
SIV 170.17									
SIV 172.17		Nottwil	6207	Luzern	H1N1		SIV_172_17_N1		PQ663429

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 173.17		Wetzikon	8512	Thurgau	H1N1		SIV_173_17_N1		PQ663420
SIV 174.17							SIV_174_17_N1		PQ663419
SIV 177.17		Frauenkappelen	3202	Bern	N1				
SIV 1.18	1.9.2018	Posieux	1725	Fribourg	N1				
SIV 2.18									
SIV 4.18	1.10.2018	Auswil	4944	Bern	N1				
SIV 8.18	2.12.2018	Leuggern	5316	Aargau	H1N1				
SIV 9.18						SIV_09_18_H1		PQ663381	
SIV 11.18	2.15.2018	Bischofszell	9220	Thurgau	N1				
SIV 12.18	3.6.2018	Gunzwil	6222	Luzern	H1N1				
SIV 17.18	3.29.2018	Sempach	6203	Luzern	H1				
SIV 22.18	4.20.2018	Schleitheim	8226	Schaffhausen	H1				
SIV 23.18									
SIV 25.18	4.23.2018	Luzern	6014	Luzern	H1N1		SIV_25_18_N1		PQ663486
SIV 26.18							SIV_26_18_N1		PQ663443
SIV 29.18	5.2.2018	Schnottwil	3253	Solothurn	H1N1				
SIV 30.18									
SIV 42.18	7.11.2018	Graben	3376	Bern	H1N1				
SIV 43.18									
SIV 50.18	8.13.2018	Luzern	6014	Luzern	H1N1				
SIV 51.18									
SIV 52.18	8.13.2018	Hohentannen	9216	Thurgau	H1N1				
SIV 53.18									
SIV 63.18	9.19.2018	Menznau	6122	Luzern	H1N1				
SIV 64.18									
SIV 65.18	9.20.2018	Sempach	6204	Luzern	H1N1				
SIV 66.18									
SIV 71.18	10.19.2018	Buttisholz	6018	Luzern	H1N1	SIV_71_18_H1		PQ663374	
SIV 72.18						SIV_72_18_H1		PQ663375	
SIV 73.18	11.12.2018	Wittenbach	9300	St. Gallen	H1N1		SIV_73_18_N1		PQ663512
SIV 74.18									
SIV 75.18	11.14.2018	Ins	3232	Bern	N1				
SIV 76.18									
SIV 81.18	11.21.2018	Malters	6102	Luzern	H1N1				
SIV 82.18									
SIV 1.19	1.4.2019	Mettmenstetten	8932	Zürich	H1N1	SIV_01_19_H1	SIV_01_19_N1	PQ663273	PQ663554
SIV 2.19							SIV_02_19_N1		PQ663555
SIV 3.19	1.16.2019	Posieux	1725	Fribourg	H1N1	SIV_03_19_H1	SIV_03_19_N1	PQ663373	PQ663488
SIV 4.19							SIV_04_19_N1		PQ663489
SIV 5.19	1.22.2019	Inwil	6034	Luzern	N1				
SIV 6.19									

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Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 7.19	1.25.2019	Dagmersellen	6252	Luzern	H1N1		SIV_07_19_N1		PQ663493
SIV 8.19									
SIV 11.19	1.29.2019	Obermumpf	4324	Aargau	H1N1		SIV_11_19_N1		PQ663409
SIV 21.19	27.02.2019	Thayngen	8240	Schaffhausen	H1N1		SIV_21_19_N1		PQ663494
SIV 23.19	3.8.2019	Altikon	8479	Zürich	H1N1	SIV_23_19_H1	SIV_23_19_N1	PQ663379	PQ663499
SIV 24.19									
SIV 34.19	4.2.2019	Merenschwand	5634	Aargau	N1				
SIV 36.19	4.5.2019	Neuenkirch	6206	Luzern	H1N1		SIV_36_19_N1		PQ663444
SIV 40.19	4.15.2019	Niederbüren	9246	St. Gallen	H1N1		SIV_40_19_N1		PQ663505
SIV 44.19	4.15.2019	Dietwil	6042	Aargau	N1		SIV_44_19_N1		PQ663506
SIV 52.19	5.13.2019	Neuenkirch	6206	Luzern	H1N1		SIV_52_19_N1		PQ663496
SIV 53.19						SIV_53_19_H1	SIV_53_19_N1	PQ663387	PQ663476
SIV 54.19	5.13.2019	Ruswil	6017	Luzern	H1N1		SIV_54_19_N1		PQ663501
SIV 55.19						SIV_55_19_H1	SIV_55_19_N1	PQ663378	PQ663495
SIV 56.19	5.22.2019	Sempach	6204	Luzern	H1N1		SIV_56_19_N1		PQ663498
SIV 58.19	5.29.2019	Hildisrieden	6024	Luzern	H1N1		SIV_58_19_N1		PQ663504
SIV 59.19							SIV_59_19_N1		PQ663500
SIV 60.19							SIV_60_19_N1		PQ663430
SIV 62.19	7.31.2019	Flühli	6173	Luzern	H1				
SIV 63.19						SIV_63_19_H1		PQ663372	
SIV 64.19	8.6.2019	Jonschwil	9243	St. Gallen	H1				
SIV 65.19	8.7.2019	Stadel	8174	Zürich	H1N1				
SIV 66.19							SIV_66_19_N1		PQ663439
SIV 68.19	8.9.2019	Rain	6026	Luzern	H1				
SIV 69.19									
SIV 76.19	9.20.2019	Eich	6205	Luzern	H1N1		SIV_76_19_N1		PQ663521
SIV 79.19	9.27.2019	Romanens	1626	Fribourg	N1				
SIV 80.19									
SIV 81.19									
SIV 83.19	10.23.2019	Neuenkirch	6206	Luzern	N1				
SIV 85.19	10.25.2019	Hagenwil bei Amriswil	8590	Thurgau	N1		SIV_85_19_N1		PQ663431
SIV 88.19	11.25.2019	Oberhelfenschwil	9621	St. Gallen	H1N1		SIV_88_19_N1		PQ663437
SIV 92.19	12.3.2019	Wolhusen	6110	Luzern	H1N1		SIV_92_19_N1		PQ663436
SIV 97.19	12.16.2019	Kaltbach	6212	Luzern	H1N1	SIV_97_19_H1	SIV_97_19_N1	PQ663359	PQ663484
SIV 99.19	12.20.2019	Benken	8717	St. Gallen	H1N1	SIV_99_19_H1	SIV_99_19_N1	PQ663386	PQ663428
SIV 100.19	12.24.2019	Arnegg	9212	St. Gallen	H1N1	SIV_100_19_H1	SIV_100_19_N1	PQ663369	PQ663407
SIV 2.20	1.7.2020	Muolen	9313	St. Gallen	H1N1	SIV_02_20_H1	SIV_02_20_N1	PQ663354	PQ663418
SIV 9.20	1.31.2020	Balgach	9436	St. Gallen	N1		SIV_09_20_N1		PQ663449
SIV 11.20	2.3.2020	Mörschwil	9402	St. Gallen	H1N1		SIV_11_20_N1		PQ663485
SIV 20.20	3.2.2020	Heimberg	3625	Bern	N1		SIV_20_20_N1		PQ663425
SIV 23.20	3.16.2020	Appenzell	9050	Appenzell Innerrhoden	H1N1		SIV_23_20_N1		PQ663477

Supplementary Table 2: GenBank Accession numbers of swine influenza virus (SIV) positive samples.

Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 26.20	3.27.2020	Schleitheim	8226	Schaffhausen	H1N1	SIV_26_20_H1	SIV_26_20_N1	PQ663370	PQ663424
SIV 27.20	3.27.2020	Ruswil	6017	Luzern	H1N1	SIV_27_20_H1	SIV_27_20_N1	PQ663360	PQ663482
SIV 28.20	4.1.2020	Gächlingen	8214	Schaffhausen	N1		SIV_28_20_N1		PQ663483
SIV 31.20	4.22.2020	Gunzwil	6222	Luzern	H1N1		SIV_31_20_N1		PQ663474
SIV 35.20	5.5.2020	Boswil	5623	Aargau	H1N1	SIV_35_20_H1	SIV_35_20_N1	PQ663380	PQ663513
SIV 37.20	5.12.2020	Scharans	7412	Graubünden	H1N1		SIV_37_20_N1		PQ663426
SIV 50.20	7.15.2020	Ruswil	6017	Luzern	H1				
SIV 55.20	8.21.2020	Neukirch	9315	Thurgau	H1				
SIV 56.20	8.27.2020	Niederwil	5524	Aargau	H1N1				
SIV 59.20	9.9.2020	Richenthal	6263	Luzern	H1				
SIV 60.20	9.15.2020	Malters	6102	Luzern	H1				
SIV 72.20	11.4.2020	Madiswil	4934	Bern	H1				
SIV 73.20	11.4.2020	Giswil	6074	Luzern	H1				
SIV 78.20	11.30.2020	Oberbüren	9245	St. Gallen	H1N1		SIV_78_20_N1		PQ663423
SIV 81.20	12.8.2020	Schleitheim	8226	Schaffhausen	H1				
SIV 82.20	12.16.2020	Fenkrieden	5645	Aargau	H1N1		SIV_82_20_N1		PQ663435
SIV 1.21	1.5.2021	Oerlingen	8461	Zürich	H1N1		SIV_01_21_N1		PQ663514
SIV 2.21	1.13.2021	Schötz	6247	Luzern	N1		SIV_02_21_N1		PQ663492
SIV 4.21	1.22.2021	Amriswil	8580	Thurgau	H1N1	SIV_04_21_H1	SIV_04_21_N1	PQ663277	PQ663487
SIV 8.21	2.19.2021	Herisau	9100	Appenzell Ausserrhoden	N1		SIV_08_21_N1		PQ663479
SIV 12.21	4.13.2021	Oberriet	9463	St. Gallen	H1				
SIV 13.21	4.20.2021	Hellbühl	6016	Luzern	H1N1		SIV_13_21_N1		PQ663432
SIV 15.21	5.19.2021	Hofstatt	6154	Luzern	H1N1	SIV_15_21_H1	SIV_15_21_N1	PQ663355	PQ663417
SIV 16.21	5.28.2021	Engelburg	9032	St. Gallen	H1N1				
SIV 17.21	5.28.2021	Sempach	6204	Luzern	N1		SIV_17_21_N1		PQ663478
SIV 21.21	6.15.2021	Triengen	6234	Luzern	N1		SIV_21_21_N1		PQ663412
SIV 27.21	8.12.2021	Küssnacht	6403	Schwyz	H1N1		SIV_27_21_N1		PQ663433
SIV 30.21	9.8.2021	Wislikofen	5463	Aargau	N1		SIV_30_21_N1		PQ663410
SIV 36.21	11.3.2021	Abtwil	5646	Abtwil	H1	SIV_36_21_H1	NA	PQ663361	
SIV 37.21	11.5.2021	Schönenberg	8824	Zürich	N1		SIV_37_21_N1		PQ663415
SIV 39.21	11.12.2021	Niederwil	5524	Aargau	H1N1				
SIV 40.21	11.23.2021	Auswil	4944	Bern	H1	SIV_40_21_H1	NA	PQ663357	
SIV 41.21	11.22.2021	Schwerzenbach	8603	Zürich	H1				
SIV 44.21	12.23.2021	Willisau	6130	Luzern	N1		SIV_44_21_N1		PQ663403
SIV 45.21	12.29.2021	Graben	3376	Bern	N1		SIV_45_21_N1		PQ663434
SIV 2.22	1.5.2022	Baar	6340	Zug	H1N1				
SIV 4.22	1.20.2022	Richenthal	6263	Luzern	H1N1	SIV_04_22_H1	SIV_04_22_N1	PQ663282	PQ663520
SIV 5.22	1.25.2022	Wittenbach	9300	St. Gallen	H1				
SIV 6.22									
SIV 16.22									
SIV 17.22	6.29.2022	Hellbühl	6016	Luzern	H1N1	SIV_17_22_H1	SIV_17_22_N1	PQ663271	PQ663404

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Sample ID	Date of receipt	Location	ZIP	Canton	Subtype	HA Sequence	NA Sequence	GenBank Accession HA	GenBank Accession NA
SIV 18.22	7.12.2022	Hellbühl	6016	Luzern	H1N1		SIV_18_22_N1		PQ663400
SIV 25.22	10.5.2022	Mauensee	6216	Luzern	N1		SIV_25_22_N1		PQ663524
SIV 31.22	10.25.2022	Siblingen	8225	SH	H1	SIV_31_22_H1	NA	PQ663356	
SIV 34.22	11.9.2022	Alikon	5643	Aargau	H1N1	SIV_34_22_H1	NA	PQ663314	
SIV 37.22	11.28.2022	Bazenheid	9602	St. Gallen	H1N1	SIV_37_22_H1	SIV_37_22_N1	PQ663353	PQ663405
SIV 38.22	12.2.2022	Hosenruck	9515	Thurgau	H1N1				
SIV 39.22	12.2.2022	Oberwil-Lieli	8966	Aargau	H1N1				
SIV 40.22	12.2.2022	Grosswangen	6022	Luzern	N1		SIV_40_22_N1		PQ663416
SIV 49.22	12.23.2022	Knutwil	6213	Luzern	H1N1		SIV_49_22_N1		PQ663406

