

Table S1. Sample information.

Strain	Sample Date	Pandemic wave	Passage isolate ^a	City	Region	Sequenced at	Sequencing platform	GenBank Accession numbers	Global Cluster	UK Cluster
A/England/195/2009	27-Apr-2009	First	S1	London	London	Cfl	Capillary	GQ166654-GQ166661	3	-
A/England/197/2009	27-Apr-2009	First	M1	Birmingham	West Midlands	Cfl	Capillary	CY065195-CY065202	2	-
A/England/200/2009	28-Apr-2009	First	S1	Bristol	South West	Cfl	Capillary	CY065227-CY065234	7	-
A/England/201/2009	02-May-2009	First	S1	Manchester	North West	Cfl	Capillary	CY065331-CY065338	1	-
A/England/202/2009	27-Apr-2009	First	S1	Bristol	South West	Cfl	Capillary	CY065187-CY065194	7	-
A/England/204/2009	28-Apr-2009	First	S1	London	London	Cfl	Capillary	CY065203-CY065210	5	D
A/England/205/2009	27-Apr-2009	First	S1	London	London	Cfl	Capillary	CY065211-CY065218	5	-
A/England/207/2009	27-Apr-2009	First	S1	Manchester	North West	Cfl	Capillary	CY065219-CY065226	7	-
A/England/211/2009	28-Apr-2009	First	S1	London	London	Cfl	Capillary	CY065251-CY065258	3	A1
A/England/214/2009	30-Apr-2009	First	S1	Birmingham	West Midlands	Cfl	Capillary	CY065267-CY065274	7	-
A/England/215/2009	30-Apr-2009	First	S1	London	London	Cfl	Capillary	CY065275-CY065282	3	A1
A/England/216/2009	30-Apr-2009	First	S1	London	London	Cfl	Capillary	CY065283-CY065290	3	A1
A/England/218/2009	02-May-2009	First	S1	Birmingham	West Midlands	Cfl	Capillary	CY065299-CY065306	3	-
A/England/219/2009	02-May-2009	First	S1	London	London	Cfl	Capillary	CY065315-CY065322	3	A2
A/England/220/2009	02-May-2009	First	S1	London	London	Cfl	Capillary	CY065323-CY065330	3	A2
A/England/223/2009	29-Apr-2009	First	S1	Cambridge	East	Cfl	Capillary	CY065339-CY065346	7	-
A/England/246/2009	02-May-2009	First	S1	London	London	Cfl	Capillary	CY065307-CY065314	3	-
A/England/247/2009	03-May-2009	First		Cambridge	East	Cfl	Capillary	CY065347-CY065354	2	-
A/England/252/2009	08-May-2009	First	S1	London	London	Cfl	Capillary	CY065387-CY065394	3	A2
A/England/253/2009	07-May-2009	First	S1	London	London	Cfl	Capillary	CY065403-CY065410	3	A2
A/England/254/2009	05-May-2009	First		London	London	Cfl	Capillary	CY065411-CY065418	3	A2
A/England/256/2009	08-May-2009	First		Cambridge	East	Cfl	Capillary	CY065427-CY065434	2	B
A/England/257/2009	09-May-2009	First		London	London	Cfl	Capillary	CY065435-CY065442	3	A2
A/England/259/2009	11-May-2009	First		London	London	Cfl	Capillary	CY065443-CY065450	7	F
A/England/263/2009	12-May-2009	First		London	London	Cfl	Capillary	CY065475-CY065482	7	F
A/England/264/2009	12-May-2009	First		Southampton	South East	Cfl	Capillary	CY065483-CY065490	7	F
A/England/265/2009	12-May-2009	First		Southampton	South East	Cfl	Capillary	CY065491-CY065498	7	F
A/England/266/2009	15-May-2009	First		London	London	Cfl	Capillary	CY065515-CY065522	3	A2
A/England/359/2009	31-May-2009	First	S1	London	London	Cfl	Capillary	CY065531-CY065538	2	C
A/England/361/2009	01-Jun-2009	First	S2	Cambridge	East	Cfl	Capillary	CY065539-CY065546	2	C
A/England/381/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065547-CY065554	2	C
A/England/382/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065555-CY065562	2	C
A/England/384/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065563-CY065570	2	C
A/England/385/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065571-CY065578	7	-
A/England/386/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065579-CY065586	2	C
A/England/388/2009	02-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065587-CY065594	3	-
A/England/389/2009	03-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065595-CY065602	7	-
A/England/392/2009	03-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065603-CY065610	7	-
A/England/394/2009	02-Jun-2009	First	M1	Southampton	South East	Cfl	Capillary	CY065611-CY065618	2	C
A/England/395/2009	01-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065619-CY065626	2	C
A/England/398/2009	03-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065627-CY065634	7	-
A/England/400/2009	05-Jun-2009	First	S1	Leicester	East Midlands	Cfl	Capillary	CY065635-CY065642	2	C
A/England/402/2009	01-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065643-CY065650	7	-
A/England/411/2009	04-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065651-CY065658	7	L
A/England/414/2009	04-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065659-CY065666	3	-
A/England/418/2009	05-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065667-CY065674	7	-
A/England/419/2009	05-Jun-2009	First	S1	London	London	Cfl	Capillary	CY065675-CY065682	7	-
A/England/423/2009	04-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065683-CY065690	2	C
A/England/428/2009	04-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065691-CY065698	2	C
A/England/430/2009	05-Jun-2009	First	S1	Birmingham	West Midlands	Cfl	Capillary	CY065699-CY065706	7	L
A/England/431/2009	05-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065707-CY065714	3	-
A/England/433/2009	05-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065715-CY065722	2	C
A/England/434/2009	06-Jun-2009	First	S1	Southampton	South East	Cfl	Capillary	CY065723-CY065730	7	-
A/England/445/2009	09-Jun-2009	First	S1	Cambridge	East	Cfl	Capillary	CY065731-CY065738	2	C
A/England/541/2009	23-Jun-2009	First	S1	Newcastle-Upon-Tyne	North East	Cfl	Capillary	CY065155-CY065162	7	K
A/England/551/2009	27-Apr-2009	First	S1	Bristol	South West	Cfl	Capillary	CY065235-CY065242	7	-
A/Scotland/91800799/2009	24-Apr-2009	First		Glasgow	Scotland	Cfl	Capillary	CY065147-CY065154	7	-
A/England/92860032/2009	06-Jul-2009	First		London	London	Cfl	Capillary	CY065163-CY065170	7	-
A/England/634/2009	01-Jul-2009	First		Lambeth	London	Cfl	Capillary	CY065171-CY065178	7	-
A/England/675/2009	10-Jul-2009	First		London	London	Cfl	Capillary	CY065179-CY065186	7	-
A/England/XFL00071/2009	27-Apr-2009	First		Southampton	South East	Cfl	Capillary	CY065243-CY065250	5	-
A/England/XFL00137/2009	29-Apr-2009	First		London	London	Cfl	Capillary	CY065259-CY065266	5	D
A/England/XFL00200/2009	04-May-2009	First		London	London	Cfl	Capillary	CY065355-CY065362	3	A2
A/England/XFL00275/2009	05-May-2009	First		London	London	Cfl	Capillary	CY065363-CY065370	3	A2
A/England/XFL00300/2009	07-May-2009	First		London	London	Cfl	Capillary	CY065371-CY065378	3	A2
A/England/XFL00304/2009	05-May-2009	First		London	London	Cfl	Capillary	CY065379-CY065386	3	A2
A/England/XFL00311/2009	07-May-2009	First		Cambridge	East	Cfl	Capillary	CY065395-CY065402	2	B
A/England/XFL00354/2009	10-May-2009	First		Cambridge	East	Cfl	Capillary	CY065419-CY065426	-	-
A/England/XFL00418/2009	11-May-2009	First		London	London	Cfl	Capillary	CY065451-CY065458	7	F
A/England/XFL00419/2009	12-May-2009	First		London	London	Cfl	Capillary	CY065459-CY065466	3	A2
A/England/XFL00473/2009	12-May-2009	First		London	London	Cfl	Capillary	CY065467-CY065474	7	F
A/England/XFL00481/2009	13-May-2009	First		London	London	Cfl	Capillary	CY065499-CY065506	7	F
A/England/XFL00482/2009	13-May-2009	First		London	London	Cfl	Capillary	CY065507-CY065514	7	-
A/England/XFL00532/2009	15-May-2009	First		London	London	Cfl	Capillary	CY065523-CY065530	7	F
A/Scotland/10/2009	11-Jun-2009	First	S1	Glasgow	Scotland	Cfl	Capillary	CY065739-CY065746	7	-
A/Scotland/4/2009	03-May-2009	First		Glasgow	Scotland	Cfl	Capillary	CY065291-CY065298	3	-
A/England/456/2009	05-Jun-2009	First	S1	Berkshire	South East	WTSI	Capillary	HM567541-HM567548	2	C
A/England/213/2009	29-Apr-2009	First	S1	London	London	WTSI	Capillary	HM567549-HM567556	5	D
A/England/217/2009	30-Apr-2009	First	M1	Southampton	South East	WTSI	Capillary	HM567557-HM567564	2	B
A/England/221/2009	02-May-2009	First	M1	London	London	WTSI	Capillary	HM567565-HM567572	3	A2
A/England/249/2009	05-May-2009	First	S1	London	London	WTSI	Capillary	HM567573-HM567580	3	A2
A/England/303/2009	26-May-2009	First	S1	Birmingham	West Midlands	WTSI	Capillary	HM567581-HM567588	7	L

A/Ireland/1/2009	24-May-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567589-HM567596	7	-
A/England/313/2009	26-May-2009	First	S1	London	London	WTSI	Capillary	HM567597-HM567604	6	E
A/England/328/2009	28-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567605-HM567612	2	C
A/England/337/2009	30-May-2009	First	S1	London	London	WTSI	Capillary	HM567613-HM567620	2	C
A/England/341/2009	30-May-2009	First	S1	London	London	WTSI	Capillary	HM567621-HM567628	7	-
A/England/342/2009	29-May-2009	First	S1	London	London	WTSI	Capillary	HM567629-HM567636	2	C
A/England/343/2009	30-May-2009	First	S1	London	London	WTSI	Capillary	HM567637-HM567644	7	L
A/England/345/2009	30-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567645-HM567652	2	C
A/England/346/2009	30-May-2009	First	S2	Southampton	South East	WTSI	Capillary	HM567653-HM567660	7	-
A/England/347/2009	30-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567661-HM567668	2	C
A/England/348/2009	30-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567669-HM567676	2	C
A/England/349/2009	30-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567677-HM567684	2	C
A/England/350/2009	27-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567685-HM567692	2	-
A/England/351/2009	31-May-2009	First	S1	Manchester	North West	WTSI	Capillary	HM567693-HM567700	6	-
A/England/360/2009	01-Jun-2009	First	S2	Berkshire	South East	WTSI	Capillary	HM567701-HM567708	2	C
A/Scotland/8/2009	31-May-2009	First	S1	Edinburgh	Scotland	WTSI	Capillary	HM567709-HM567716	7	-
A/England/364/2009	31-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567717-HM567724	2	C
A/England/365/2009	31-May-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567725-HM567732	2	-
A/England/366/2009	31-May-2009	First	S2	Birmingham	West Midlands	WTSI	Capillary	HM567733-HM567740	7	I
A/England/374/2009	01-Jun-2009	First	S1	Leeds	Yorkshire and the Humber	WTSI	Capillary	HM567741-HM567748	2	C
A/England/377/2009	02-Jun-2009	First	S1	London	London	WTSI	Capillary	HM567749-HM567756	2	C
A/England/380/2009	02-Jun-2009	First	S1	Manchester	North West	WTSI	Capillary	HM567757-HM567764	7	-
A/England/383/2009	01-Jun-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567765-HM567772	2	C
A/England/391/2009	02-Jun-2009	First	S1	London	London	WTSI	Capillary	HM567773-HM567780	6	-
A/England/393/2009	02-Jun-2009	First	S1	London	London	WTSI	Capillary	HM567781-HM567788	7	-
A/England/399/2009	03-Jun-2009	First	S1	London	London	WTSI	Capillary	HM567789-HM567796	2	C
A/England/401/2009	03-Jun-2009	First	S1	Newcastle-Upon-Tyne	North East	WTSI	Capillary	HM567797-HM567804	2	-
A/Ireland/2/2009	26-May-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567805-HM567812	7	-
A/Ireland/7/2009	01-Jun-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567813-HM567820	7	I
A/Ireland/10/2009	05-Jun-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567821-HM567828	7	I
A/Ireland/3/2009	26-May-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567829-HM567836	7	-
A/Ireland/4/2009	29-May-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567837-HM567844	7	-
A/Ireland/5/2009	31-May-2009	First	S1	Dublin	Ireland	WTSI	Capillary	HM567845-HM567852	6	-
A/England/415/2009	04-Jun-2009	First	S1	Leicester	East Midlands	WTSI	Capillary	HM567853-HM567860	7	-
A/England/416/2009	02-Jun-2009	First	S1	Leicester	East Midlands	WTSI	Capillary	HM567861-HM567868	7	J
A/England/421/2009	06-Jun-2009	First	S1	London	London	WTSI	Capillary	HM567869-HM567876	7	-
A/England/424/2009	04-Jun-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567877-HM567884	7	H
A/England/429/2009	08-Jun-2009	First	S2	Birmingham	West Midlands	WTSI	Capillary	HM567885-HM567892	7	H
A/England/432/2009	05-Jun-2009	First	S2	Southampton	South East	WTSI	Capillary	HM567893-HM567900	6	E
A/England/435/2009	06-Jun-2009	First	S1	Southampton	South East	WTSI	Capillary	HM567901-HM567908	7	H
A/England/436/2009	05-Jun-2009	First	S2	Southampton	South East	WTSI	Capillary	HM567909-HM567916	6	E
A/England/443/2009	05-Jun-2009	First	S1	Leicester	East Midlands	WTSI	Capillary	HM567917-HM567924	6	E
A/England/446/2009	09-Jun-2009	First	S1	Cambridge	East	WTSI	Capillary	HM567949-HM567956	7	J
A/England/450/2009	07-Jun-2009	First	S2	Birmingham	West Midlands	WTSI	Capillary	HM567933-HM567940	7	J
A/England/451/2009	07-Jun-2009	First	S2	Birmingham	West Midlands	WTSI	Capillary	HM567941-HM567948	7	J
A/England/857/2009	25-Nov-2009	Second		Stamford	East Midlands	WTSI	Capillary	HM567949-HM567956	7	K
A/England/865/2009	23-Nov-2009	Second		Bristol	South West	WTSI	Capillary	HM567957-HM567964	7	-
A/England/876/2009	20-Nov-2009	Second		London	London	WTSI	Capillary	HM567965-HM567972	7	G
A/England/1111/2009	21-Oct-2009	Second		Windsor	South East	WTSI	Capillary	HM567973-HM567980	7	-
A/England/869/2009	18-Nov-2009	Second		Wantage	South East	WTSI	illumina	HM567981-HM567988	7	-
A/England/859/2009	25-Nov-2009	Second		Stamford	East Midlands	WTSI	illumina	HM567989-HM567996	7	-
A/England/900/2009	24-Nov-2009	Second		Steyning	South East	WTSI	illumina	HM567997-HM568004	7	G
A/England/854/2009	23-Nov-2009	Second		Gloucester	South West	WTSI	illumina	HM568005-HM568012	7	G
A/England/872/2009	20-Nov-2009	Second		Peterborough	East	WTSI	illumina	HM568013-HM568020	7	L
A/England/862/2009	23-Nov-2009	Second		London	London	WTSI	illumina	HM568021-HM568028	7	G
A/England/902/2009	20-Nov-2009	Second		Nottingham	East Midlands	WTSI	illumina	HM568029-HM568036	7	L
A/England/898/2009	25-Nov-2009	Second		Peterborough	East	WTSI	illumina	HM568037-HM568044	7	L
A/England/950/2009	20-Oct-2009	Second		Aldershot	South East	WTSI	illumina	HM568045-HM568052	7	-
A/England/1116/2009	21-Oct-2009	Second		Windsor	South East	WTSI	illumina	HM568053-HM568060	7	G
A/England/H094240645/2009	12-Oct-2009	Second		Birmingham	West Midlands	WTSI	illumina	HM568061-HM568068	7	K
A/England/H094220579/2009	12-Oct-2009	Second		Huntingdon	East	WTSI	illumina	HM568069-HM568076	7	L
A/England/1213/2009	28-Oct-2009	Second		Scunthorpe	Yorkshire and the Humber	WTSI	illumina	HM568077-HM568084	7	L
A/England/H094380096/2009	21-Oct-2009	Second		Newcastle-Under-Lyme	West Midlands	WTSI	illumina	HM568085-HM568092	7	K
A/England/766/2009	21-Oct-2009	Second		Aylesbury	South East	WTSI	illumina	HM568093-HM568100	7	-
A/England/797/2009	26-Oct-2009	Second		Liverpool	North West	WTSI	illumina	HM568101-HM568108	7	-
A/England/798/2009	22-Oct-2009	Second		Liverpool	North West	WTSI	illumina	HM568109-HM568116	7	K
A/England/941/2009	02-Dec-2009	Second		London	London	WTSI	illumina	HM568117-HM568124	7	-
A/England/938/2009	30-Dec-2009	Second		Bristol	South West	WTSI	illumina	HM568125-HM568132	7	-
A/England/H093780041/2009	09-Sep-2009	Second		Workington	North West	WTSI	illumina	HM568133-HM568140	7	-
A/England/H093780034/2009	10-Sep-2009	Second		Peterborough	East	WTSI	illumina	HM568141-HM568148	7	L
A/England/H093900113/2009	18-Sep-2009	Second		Nottingham	East Midlands	WTSI	illumina	HM568149-HM568156	7	-

^a Letter indicates cell type in which virus was passaged (M = MDCK, S = SIAT), number indicates number of passages; isolates without passage information were RT-PCR amplified from clinical material