

ex Minor	Intro	Genotype	Reported Name	PB2	PB1	PA	HA	NP	NA	M	NS	reassorted genes
Minor03	A1	A1	EA 2.3.4.4b H5N1 (A1)	ea1	ea1	ea1	ea1	ea1	ea1	ea1	ea1	none
	A2	A2	EA 2.3.4.4b H5N1 (A2)	ea2	ea2	ea2	ea2	ea2	ea2	ea2	ea2	none
	A3	A3	EA 2.3.4.4b H5N1 (A3)	ea3	ea3	ea3	ea3	ea3	ea3	ea3	ea3	none
	A4	A4	EA 2.3.4.4b H5N1 (A4)	ea4	ea4	ea4	ea4	ea4	ea4	ea4	ea4	none
	A5	A5	EA 2.3.4.4b H5N1 (A5)	ea5	ea5	ea5	ea5	ea5	ea5	ea5	ea5	none
	A6	A6	EA 2.3.4.4b H5N5 (A6)	ea6	ea6	ea6	ea6	ea6	ea6(N5)	ea6	ea6	fully Eurasian (N5)
	A1	B1.1	EA/AM 2.3.4.4b H5N1 (B1.1)	am1.1	am1.1	ea1	ea1	am1.2	ea1	ea1	ea1	PB2 PB1 NP
	A1	B1.2	EA/AM 2.3.4.4b H5N1 (B1.2)	am1.1	am1.1	am1	ea1	am1.2	ea1	ea1	ea1	PB2 PB1 NP
	A1	B1.3	EA/AM 2.3.4.4b H5N1 (B1.3)	am1.3	am1.3	am1.2	ea1	am1.2	ea1	ea1	ea1	PB2 PB1 NP
	A1	B2.1	EA/AM 2.3.4.4b H5N1 (B2.1)	am1.2	ea1	ea1	ea1	am1.1	ea1	ea1	ea1	PB2 NP
	A1	B2.2	EA/AM 2.3.4.4b H5N1 (B2.2)	am1.2	ea1	ea1	ea1	am1.1	ea1	ea1	am1.2	PB2 NP NS
	A1	B3.1	EA/AM 2.3.4.4b H5N1 (B3.1)	am2.1	ea1	ea1	ea1	am1.4.1	ea1	ea1	ea1	PB2 NP
	A1	B3.2	EA/AM 2.3.4.4b H5N1 (B3.2)	am2.1	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.3	EA/AM 2.3.4.4b H5N1 (B3.3)	am13	am1.4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.4	EA/AM 2.3.4.4b H5N1 (B3.4)	am4	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP
	A1	B3.5	EA/AM 2.3.4.4b H5N1 (B3.5)	am3.2	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.6	EA/AM 2.3.4.4b H5N1 (B3.6)	am5	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.7	EA/AM 2.3.4.4b H5N1 (B3.7)	am2.2	am4	ea1	ea1	am4	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.8	EA/AM 2.3.4.4b H5N1 (B3.8)	am5	am4	ea1	ea1	am1.2	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.9	EA/AM 2.3.4.4b H5N1 (B3.9)	am2.2	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.10	EA/AM 2.3.4.4b H5N1 (B3.10)	am5	am4	ea1	ea1	am4	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.11	EA/AM 2.3.4.4b H5N1 (B3.11)	am5	am4	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.12	EA/AM 2.3.4.4b H5N1 (B3.12)	am5	am4	ea1	ea1	am11	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	B3.13	EA/AM 2.3.4.4b H5N1 (B3.13)	am2.2	am4	ea1	ea1	am8	ea1	ea1	am1.1	PB2 PB1 NP NS
Minor85	A1	B4.1	EA/AM 2.3.4.4b H5N1 (B4.1)	am2.2	ea1	ea1	ea1	am1.3	ea1	ea1	ea1	PB2 NP
	A1	B5.1	EA/AM 2.3.4.4b H5N1 (B5.1)	ea1	ea1	ea1	ea1	am1.4.2	ea1	ea1	ea1	NP
	A2	C1.1	EA/AM 2.3.4.4b H5N1 (C1.1)	ea1	am1.3	ea1	ea2	ea1	ea2	ea1	ea1	PB1
	A2	C2.1	EA/AM 2.3.4.4b H5N1 (C2.1)	am19	am20	am3	ea2	ea1	ea2	ea1	ea1	PB2 PB1 PA
	A2	C3.1	EA/AM 2.3.4.4b H5N1 (C3.1)	am22	am10	ea1	ea2	am5	ea2	ea1	am5	PB2 PB1 NP NS
	A3	D1.1	EA/AM 2.3.4.4b H5N1 (D1.1)	am24	ea3	am4	ea3	am13	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	D1.2	EA/AM 2.3.4.4b H5N1 (D1.2)	am24	ea3	am5	ea3	am13	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	D1.3	EA/AM 2.3.4.4b H5N1 (D1.3)	am24	ea3	am4	ea3	am13	ea3	ea3	ea3	PB2 PA NP
	A3	D2.1	EA/AM 2.3.4.4b H5N2 (D2.1)	am25	ea3	am4	ea3	am1.1	am5(N2)	ea3	ea3	PB2 PA NP NA
	A1	Minor01	EA/AM 2.3.4.4b H5N1 (Minor01)	am1.1	ea1	ea1	ea1	am1.2	ea1	ea1	ea1	PB2 NP
	A1	Minor04	EA/AM 2.3.4.4b H5N1 (Minor04)	ea1	ea1	ea1	ea1	am1.1	ea1	ea1	ea1	NP
Minor96	A1	Minor07	EA/AM 2.3.4.4b H5N1 (Minor07)	am2.1	ea1	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 NP NS
	A1	Minor08	EA/AM 2.3.4.4b H5N1 (Minor08)	am2.2	ea1	ea1	ea1	am1.6	ea1	ea1	ea1	PB2 NP
	A1	Minor09	EA/AM 2.3.4.4b H5N1 (Minor09)	ea1	ea1	ea1	ea1	am1.4.1	ea1	ea1	ea1	NP
	A1	Minor10	EA/AM 2.3.4.4b H5N1 (Minor10)	am14	ea1	ea1	ea1	am1.6	ea1	ea1	ea1	PB2 NP
	A1	Minor11	EA/AM 2.3.4.4b H5N1 (Minor11)	am2.3.2	ea1	ea1	ea1	am1.5	ea1	ea1	ea1	PB2 NP
	A1	Minor12	EA/AM 2.3.4.4b H5N1 (Minor12)	ea1	ea1	ea1	ea1	am1.6	ea1	ea1	ea1	NP
	A1	Minor13	EA/AM 2.3.4.4b H5N1 (Minor13)	am1.2	ea1	ea1	ea1	am1.4.1	ea1	ea1	ea1	PB2 NP
	A1	Minor14	EA/AM 2.3.4.4b H5N1 (Minor14)	am2.3.1	am2	am2	ea1	am2	ea1	ea1	am1.3	PB2 PB1 PA NP NS
	A1	Minor15	EA/AM 2.3.4.4b H5N1 (Minor15)	am2.1	am1.2	ea1	ea1	am1.4.1	ea1	ea1	ea1	PB2 PB1 NP
	A1	Minor16	EA/AM 2.3.4.4b H5N4 (Minor16)	am2.2	am6	ea1	ea1	am3	am1(N4)	ea1	ea1	PB2 PB1 NP NA
	A1	Minor17	EA/AM 2.3.4.4b H5N1 (Minor17)	am3.1	ea1	ea1	ea1	ea1	ea1	ea1	ea1	PB2
	A1	Minor18	EA/AM 2.3.4.4b H5N1 (Minor18)	am3.3	am2	ea1	ea1	am1.4.1	ea1	ea1	am1.4	PB2 PB1 NP NS
	A1	Minor19	EA/AM 2.3.4.4b H5N1 (Minor19)	am1.2	am1.2	ea1	ea1	am1.1	ea1	ea1	ea1	PB2 PB1 NP
	A1	Minor24	EA/AM 2.3.4.4b H5N1 (Minor24)	am2.2	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS

ex Minor	Intro	Genotype	Reported Name	PB2	PB1	PA	HA	NP	NA	M	NS	reassorted genes
	A1	Minor25	EA/AM 2.3.4.4b H5N1 (Minor25)	am1.2	am1.1	ea1	ea1	am1.1	ea1	ea1	am1.2	PB2 PB1 NP NS
	A1	Minor26	EA/AM 2.3.4.4b H5N1 (Minor26)	am1.2	am1.2	ea1	ea1	am1.2	ea1	ea1	ea1	PB2 PB1 NP
	A1	Minor27	EA/AM 2.3.4.4b H5N1 (Minor27)	am2.1	ea1	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 NP NS
	A1	Minor28	EA/AM 2.3.4.4b H5N1 (Minor28)	am1.1	am1.2	ea1	ea1	am1.2	ea1	ea1	am1.2	PB2 PB1 NP NS
	A1	Minor29	EA/AM 2.3.4.4b H5N1 (Minor29)	am1.2	am1.2	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor30	EA/AM 2.3.4.4b H5N1 (Minor30)	am1.2	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor31	EA/AM 2.3.4.4b H5N1 (Minor31)	am1.2	am1.2	ea1	ea1	am1.4.1	ea1	ea1	ea1	PB2 PB1 NP
	A1	Minor32	EA/AM 2.3.4.4b H5N1 (Minor32)	am2.1	am5	ea1	ea1	am4	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor33	EA/AM 2.3.4.4b H5N1 (Minor33)	am2.1	am1.2	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor34	EA/AM 2.3.4.4b H5N1 (Minor34)	am11	am1.2	ea1	ea1	am5	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor35	EA/AM 2.3.4.4b H5N1 (Minor35)	am2.1	am1.2	ea1	ea1	am1.2	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor36	EA/AM 2.3.4.4b H5N5 (Minor36)	am1.3	am1.3	am1.2	ea1	am1.2	am2(N5)	ea1	ea1	PB2 PB1 NP
	A1	Minor37	EA/AM 2.3.4.4b H5N1 (Minor37)	am15	am6	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor38	EA/AM 2.3.4.4b H5N1 (Minor38)	am6	am7	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor39	EA/AM 2.3.4.4b H5N1 (Minor39)	am7	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor40	EA/AM 2.3.4.4b H5N1 (Minor40)	am1.2	am8	ea1	ea1	am1.1	ea1	ea1	am1.2	PB2 PB1 NP NS
	A1	Minor41	EA/AM 2.3.4.4b H5N1 (Minor41)	am10	am9	ea1	ea1	am6	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor42	EA/AM 2.3.4.4b H5N1 (Minor42)	am11	am10	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor43	EA/AM 2.3.4.4b H5N1 (Minor43)	am1.2	ea1	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 NP NS
	A1	Minor44	EA/AM 2.3.4.4b H5N1 (Minor44)	am2.2	am1.2	ea1	ea1	am7	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor45	EA/AM 2.3.4.4b H5N1 (Minor45)	am12	am11	ea1b	ea1	am1.3	ea1	ea1	am1.2	PB2 PB1 PA NP NS
	A1	Minor46	EA/AM 2.3.4.4b H5N1 (Minor46)	am8	am12	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor47	EA/AM 2.3.4.4b H5N1 (Minor47)	am9	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor48	EA/AM 2.3.4.4b H5N1 (Minor48)	am1.3	am1.3	am1.2	ea1	am1.2	ea1	ea1	am3	PB2 PB1 PA NP NS
	A1	Minor50	EA/AM 2.3.4.4b H5N1 (Minor50)	am13	am1.2	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor51	EA/AM 2.3.4.4b H5N1 (Minor51)	am5	am7	ea1	ea1	am8	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor52	EA/AM 2.3.4.4b H5N1 (Minor52)	am2.2	am4	am1	ea1	am4	ea1	ea1	am1.1	PB2 PB1 PA NP NS
	A1	Minor53	EA/AM 2.3.4.4b H5N1 (Minor53)	am2.2	am4	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor55	EA/AM 2.3.4.4b H5N1 (Minor55)	am5	am13	ea1	ea1	am9	ea1	ea1	am1.1	PB2 PB1 NP NS
	A2	Minor56	EA/AM 2.3.4.4b H5N6 (Minor56)	am16	am2	ea1	ea2	am1.1	am3(N6)	ea1	am4	PB2 PB1 NP NA NS
	A2	Minor57	EA/AM 2.3.4.4b H5N1 (Minor57)	am17	am14	ea1	ea2	am10	ea1	ea1	ea1	PB2 PB1 NP
	A1	Minor58	EA/AM 2.3.4.4b H5N1 (Minor58)	am5	am4	ea1	ea1	am7	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor60	EA/AM 2.3.4.4b H5N1 (Minor60)	am2.1	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor61	EA/AM 2.3.4.4b H5N1 (Minor61)	am1.1	am15	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor62	EA/AM 2.3.4.4b H5N1 (Minor62)	am17	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor63	EA/AM 2.3.4.4b H5N1 (Minor63)	am18	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A2	Minor65	EA/AM 2.3.4.4b H5N1 (Minor65)	am19	ea2	am3	ea2	ea1	ea2	ea1	ea1	PB2 PA
	A2	Minor66	EA/AM 2.3.4.4b H5N1 (Minor66)	ea1	am13	ea1	ea2	am9	ea2	ea1	am1.2	PB1 NP NS
	A2	Minor67	EA/AM 2.3.4.4b H5N1 (Minor67)	am17	am16	am1	ea2	am10	ea2	ea1	ea1	PB2 PB1 PA NP NS
	A1	Minor70	EA/AM 2.3.4.4b H5N1 (Minor70)	am5	am1.3	ea1	ea1	am1.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor71	EA/AM 2.3.4.4b H5N1 (Minor71)	am5	am17	ea1	ea1	am8	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor73	EA/AM 2.3.4.4b H5N1 (Minor73)	am20	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor74	EA/AM 2.3.4.4b H5N1 (Minor74)	am6	am4	ea1	ea1	am1.6	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor75	EA/AM 2.3.4.4b H5N1 (Minor75)	am19	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor76	EA/AM 2.3.4.4b H5N1 (Minor76)	am2.2	am18	ea1	ea1	am4	ea1	ea1	am1.1	PB2 PB1 NP NS
	A2	Minor77	EA/AM 2.3.4.4b H5N1 (Minor77)	am11	ea2	ea1	ea2	ea1	ea2	ea1	ea1	PB2
	A2	Minor78	EA/AM 2.3.4.4b H5N1 (Minor78)	am2.2	ea2	ea1	ea2	am11	ea2	ea1	ea1	PB2 NP
	A1	Minor79	EA/AM 2.3.4.4b H5N1 (Minor79)	am5	am4	ea1	ea1	am1.6	ea1	ea1	am1.1	PB2 PB1 NP NS
	A2	Minor80	EA/AM 2.3.4.4b H5N1 (Minor80)	am7	am10	ea1	ea2	am5	a2	ea1	am4	PB2 PB1 NP NS

ex Minor	Intro	Genotype	Reported Name	PB2	PB1	PA	HA	NP	NA	M	NS	reassorted genes
	A2	Minor81	EA/AM 2.3.4.4b H5N1 (Minor81)	am19	am14	ea1	ea2	am10	ea2	ea1	ea1	PB2 PB1 NP
	A1	Minor82	EA/AM 2.3.4.4b H5N1 (Minor82)	am21	am4	ea1	ea1	am1.4.1	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor83	EA/AM 2.3.4.4b H5N1 (Minor83)	am5	am18	ea1	ea1	am1.5	ea1	ea1	am1.1	PB2 PB1 NP NS
	A1	Minor84	EA/AM 2.3.4.4b H5N1 (Minor84)	am19	am4	ea1	ea1	am1.4.1	ea4b	ea1	am1.1	PB2 PB1 NP NA NS
	A2	Minor86	EA/AM 2.3.4.4b H5N1 (Minor86)	am2.2	ea2	ea1	ea2	am1.1	ea2	ea1	ea1	PB2 NP
	A2	Minor87	EA/AM 2.3.4.4b H5N1 (Minor87)	am19	am20	am3	ea2	am1.1	ea2	ea1	ea1	PB2 PB1 PA NP
	A2	Minor89	EA/AM 2.3.4.4b H5N1 (Minor89)	am19	am20	ea1	ea2	ea1	ea2	ea1	ea1	PB2 PB1
	A2	Minor90	EA/AM 2.3.4.4b H5N1 (Minor90)	am19	am2	am3	ea2	am5	ea2	ea1	ea1	PB2 PB1 PA NP
	A2	Minor91	EA/AM 2.3.4.4b H5N1 (Minor91)	am19	am20	am3	ea2	am1.2	ea2	ea1	ea1	PB2 PB1 PA NP
	A2	Minor92	EA/AM 2.3.4.4b H5N1 (Minor92)	am23	ea2	ea1	ea2	am10	ea2	ea1	am1.2	PB2 NP NS
	A2	Minor93	EA/AM 2.3.4.4b H5N1 (Minor93)	am23	ea2	ea1	ea2	ea1	ea2	ea1	ea1	PB2
	A2	Minor94	EA/AM 2.3.4.4b H5N1 (Minor94)	am19	am12	am1	ea2	am12	ea2	ea1	ea1	PB2 PB1 PA NP
	A3	Minor95	EA/AM 2.3.4.4b H5N1 (Minor95)	am26	am21	am6	ea3	ea3	ea3	am1	ea3	PB2 PB1 PA MP
	A3	Minor96	EA/AM 2.3.4.4b H5N1 (Minor96)	am1.1	ea3	am4	ea3	am13	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	Minor97	EA/AM 2.3.4.4b H5N1 (Minor97)	am24	ea3	am4	ea3	ea3	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	Minor98	EA/AM 2.3.4.4b H5N2 (Minor98)	am2.1	ea3	am7	ea3	am14	am6(N2)	ea3	ea3	PB2 PA NP NA
	A3	Minor99	EA/AM 2.3.4.4b H5N1 (Minor99)	am27	ea3	am4	ea3	am13	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	Minor100	EA/AM 2.3.4.4b H5N1 (Minor100)	am3.2	ea3	am4	ea3	am13	am4(N1)	ea3	ea3	PB2 NP NA
	A3	Minor101	EA/AM 2.3.4.4b H5N9 (Minor101)	am24	ea3	am4	ea3	am11	am7(N9)	ea3	ea3	PB2 PA NP NA
	A3	Minor102	EA/AM 2.3.4.4b H5N5 (Minor102)	am1.1	ea3	am8	ea3	am13	am8(N5)	ea3	ea3	PB2 PA NP NA
	A3	Minor103	EA/AM 2.3.4.4b H5N1 (Minor103)	am27	ea3	ea3	ea3	ea3	ea3	ea3	ea3	PB2
	A3	Minor104	EA/AM 2.3.4.4b H5N1 (Minor104)	am1.1	ea3	am4	ea3	am13	am4(N1)	ea3	ea3	PB2 PA NP NA
	A3	Minor105	EA/AM 2.3.4.4b H5N1 (Minor105)	am2.2	ea3	am4	ea3	am13	ea3	ea3	ea3	PB2 PA NP NA
	A3	Minor106	EA/AM 2.3.4.4b H5N1 (Minor106)	ea3	ea3	ea3	ea3	am11	ea3	ea3	ea3	NP