

Supplementary Table 1 List of WNV sequences from the GenBank used in the phylogenetic analysis

No.	GenBank Accession number	Country of Collection	Year of Collection	Lineage	Host
1	KJ831223	Austria	2013	4	<i>Uranotaenia unguiculata</i>
2	FJ159131	Russia	2005	4	<i>Uranotaenia unguiculata</i>
3	AY277251	Russia	1998	4	<i>Dermacentor marginatus</i>
4	FJ159130	Russia	2005	4	<i>Uranotaenia unguiculata</i>
5	FJ159129	Russia	2005	4	<i>Uranotaenia unguiculata</i>
6	AY765264	Czech Republic	2005	3	<i>Culex pipiens</i>
7	KY703856	Senegal	1992	8	<i>Culex perfuscus</i>
8	GQ851605	India	1957	5	Mosquito
9	DQ256376	India	1980	5	<i>Homo sapiens</i>
10	JX041632	India	1955	5	<i>Culex vishnui</i>
11	KU978770	India	1988	5	<i>Homo sapiens</i>
12	KX394403	Australia	1963	1/KUN*	<i>Anopheles bancroftii</i>
13	AY274505	Australia	2003	1/KUN*	-
14	KX394388	Australia	1974	1/KUN*	<i>Culex annulirostris</i>
15	KX394386	Australia	1974	1/KUN*	<i>Culex annulirostris</i>
16	AY603654	Ethiopia	2004	1	-
17	GQ851606	Senegal	1979	1	-
18	JN858069	Italy	2011	1	<i>Homo sapiens</i>
19	KU588135	UAE	2015	1	<i>Camelus dromedarius</i>
20	AF260969	Romania	1996	1	<i>Culex pipiens</i>
21	MN149538	Russia	2006	1	<i>Acrocephalus dumetorum</i>
22	AF404757	Italy	1998	1	Equine
23	AY268132	France	2000	1	Horse
24	HM152775	Israel	2000	1	<i>Homo sapiens</i>
25	MT863559	France	2015	1	<i>Equus caballus</i>
26	DQ786572	France	2004	1	<i>Passer domesticus</i>
27	FJ483548	Italy	2008	1	Magpie
28	JF719068	Italy	2009	1	Jay
29	AY268133	Tunisia	1997	1	<i>Homo sapiens</i>

30	GQ379156	USA	2001	1	Crow
31	DQ164194	USA	2001	1	American crow
32	HM488114	USA	2002	1	<i>Aedes cinereus</i>
33	DQ164193	USA	2002	1	American crow
34	DQ164200	USA	2002	1	<i>Homo sapiens</i>
35	DQ164195	USA	2002	1	<i>Culex pipiens/restuans</i>
36	MH170234	USA	2003	1	<i>Pica hudsonia</i>
37	AF404755	USA	2000	1	Ruffed grouse
38	AF260967	USA	1999	1	Horse
39	FJ151394	USA	1999	1	Crow
40	AF196835	USA	1999	1	Flamingo
41	AF404753	USA	2000	1	Crow
42	KC407667	Spain	2007	1	Mouse
43	MZ605382	Hungary	2004	1	Goshawk
44	MZ605381	USA	1999	1	Flamingo
45	AF202541	USA	1999	1	<i>Homo sapiens</i>
46	AF404754	USA	2000	1	<i>Culex pipiens</i>
47	HQ596519	USA	1999	1	Crow
48	MH924836	Germany	2018	2	<i>Strix nebulosa</i>
49	MH986056	Germany	2018	2	<i>Turdus merula</i>
50	LR743429	Germany	2018	2	Tawny Owl
51	MW142227	Germany	2020	2	<i>Homo sapiens</i>
52	MH986055	Germany	2018	2	<i>Turdus merula</i>
53	MN794939	Germany	2019	2	<i>Prunella modularis</i>
54	LR743455	Germany	2019	2	<i>Culex pipiens</i>
55	LR743458	Germany	2019	2	<i>Bubo scandiacus</i>
56	MW072297	Germany	2020	2	<i>Homo sapiens</i>
57	MF984341	Austria	2015	2	<i>Homo sapiens</i>
58	KM203861	Czech Republic	2013	2	<i>Culex modestus</i>
59	MT863560	France	2018	2	<i>Buteo buteo</i>
60	MT863561	France	2018	2	<i>Accipiter gentilis</i>
61	KP789957	Italy	2014	2	<i>Homo sapiens</i>
62	KU573083	Italy	2013	2	<i>Culex pipiens</i>

63	MN939563	Italy	2018	2	<i>Homo sapiens</i>
64	MN939564	Italy	2016	2	<i>Homo sapiens</i>
65	MH910045	Germany	2018	2	<i>Homo sapiens</i>
66	MF984344	Austria	2015	2	Goshawk
67	MH244512	Slovakia	2013	2	Northern goshawk
68	KP780837	Austria	2008	2	<i>Nestor notabilis</i> (Kea)
69	KP780838	Austria	2009	2	<i>Nestor notabilis</i> (Kea)
70	MF984345	Austria	2015	2	Falcon
71	MF984350	Austria	2016	2	Horse
72	MK947396	Slovenia	2018	2	Mosquito
73	MH244513	Slovakia	2013	2	Eurasian sparrow hawk
74	KU206781	Bulgaria	2015	2	<i>Homo sapiens</i>
74	MN481591	Greece	2018	2	Dog
76	KT757323	Serbia	2013	2	<i>Culex pipiens</i>
77	KJ883348	Greece	2013	2	<i>Homo sapiens</i>
78	KJ883349	Greece	2013	2	<i>Homo sapiens</i>
79	MN652878	Greece	2018	2	<i>Culex spp.</i>
80	DQ116961	Hungary	2004	2	Goshawk
81	MK327789	Malaysia	2017	2	Wild bird
82	MK327792	Malaysia	2017	2	Wild bird
83	MK327791	Malaysia	2017	2	Wild bird
84	MK327793	Malaysia	2017	2	Wild bird
85	EF429197	South Africa	1989	2	<i>Homo sapiens</i>
86	KY523178	Uganda	2009	2	<i>Culex neavei</i>
87	LC318700	Zambia	2016	2	<i>Culex quinquefasciatus</i>
88	JN393308	South Africa	2008	2	Horse
89	EF429198	South Africa	2001	2	<i>Homo sapiens</i>
90	JX041631	Ukraine	1980	2	Bird
91	DQ318019	Senegal	2006	2	-
92	NC_001563	USA	2019	2	Clone*
93	AY532665	USA	2004	2	Clone**
94	KT207791	Italy	2014	2	Mosquito
95	KJ934710	Romania	2013	2	<i>Hyalomma marginatum</i>

96	FJ425721	Russia	2007	2	<i>Homo sapiens</i>
97	DQ318020	CAR	2005	2	-
98	EF429200	South Africa	1958	2	<i>Homo sapiens</i>
99	HM147824	DRC	1958	2	-
100	DQ176636	Madagascar	1978	2	<i>Coracopsis vasa</i>
101	KY703855	Senegal	1993	7/Koutango	<i>Rhipicephalus guilhoni</i>

Note: KUN* – Kunjin; Clone* – NCBI Reference Sequence West Nile virus lineage 2; Clone** – Suckling mouse brain passage 2; CAR – Central African Republic; DRC – Democratic Republic of Congo; UAE – United Arab Emirates; USA – United States of America.