

Electronic Supplementary Material

Phylogenetic Analysis of the Dengue Virus Strains Causing the 2019 Dengue Fever Outbreak in Hainan, China

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Supporting information to DOI: 10.1007/s12250-020-00335-x

Table S1. The primers used in this study.

ID Primer	Primer sense F (5'-3')	Primer antisense R (5'-3')
DENV1	TCAATATGCTGAAACGCGCGAGAAACCG	CGTCTCAGTGATCCGGGGG
DENV2	TCAATATGCTGAAACGCGCGAGAAACCG	CGCCACAAGGGCCATGAACAG
DENV3	TCAATATGCTGAAACGCGCGAGAAACCG	TAACATCATCATGAGACAGAGC
DENV4	TCAATATGCTGAAACGCGCGAGAAACCG	CTCTGTTGTCTTAAACAAGAGA
DENV1 <i>E</i> gene 1	CCAAAGTGGCGAGCACCGACGA	ATCCCAGCAACATCTCCTACAACCA
DENV1 <i>E</i> gene 2	CACACGTGGGACTTGGTTTGGAGA	CATTTTCAAGCAAGATGTGGTTCAA
DENV1 complete sequence		
Fragment 1-1	AGTTGTTAGGCTACGTGGACCGACA	CTTTTCCGAAGAGCCCACAGCCAT
Fragment 1-2	AGTTGTTAGGCTACGTGGACCGACA	GGCTTCTCCTTGTGTTGGACATCTT
Fragment 2-1	CTGAAGGCGCTTGGAACAGATAACA	CACACACCCTCCTCCCACGCTT
Fragment 2-2	CACGGTGATAGCCTTTTTTTTAGCA	GCTGCTGATAGTCTCTTTGGGGAAT
Fragment 3-1	CTTAGGAGTCATGGTTCAGGCGGAT	TAGCGGCACATCATTTTTGAGGAGT
Fragment 3-2	AGAGAACTCAAATGTGGAAGTGGCA	CTTTTCCTTCCCAGATTTTGT
Fragment 4-1	GCATGGAAGACAATGGCTATGGTAC	CTGTGTCAAAGGTTTTCCTGCTCAA
Fragment 4-2	CTCTCTTCCCCCTATGCCTGTCCA	AATCACCCGTTTCCCATTCTTTCTT
Fragment 5-1	CCACAGAGCAACGCAGTTATCCAA	TGCTTGCAGTCCAGGTCCAATTATA
Fragment 5-2	ATGGAATTCAGGTTATGAGTGGATC	CTAGCATCAATACCGCCGCTGTCA
Fragment 6-1	CCCTCTATGCAGTGGCCACAACAAT	ACCGCTCATCTTCCACTGCTTCTTT
Fragment 6-2	CAGCAAACATTTCCCTGACAGCCAT	GAACACTGCTCCAATGGCTGCGT
Fragment 7-1	GACACTACACCCTTTGGACAACAGA	GATTCAACAGCACCATTCCATTTTC
Fragment 7-2	AGTTGACACACGCACACCAAAGCA	CGTTCTGTGCCTGGAATGATGCTGT

Table S2. The clinical characteristics of DF patients

Number	Collection date	Gender	NS1 antigen test	Age(year)	Dates of onset	E protein sequencing
1	2019.9.17	Male	Negative	4 months	Unknown	
2	2019.9.23	Female	—	6 months	2019.9.22	
3	2019.9.18	Male	—	1	Unknown	
4	2019.9.18	Female	Weakly positive	1	Unknown	
5	2019.9.19	Female	Negative	1	Unknown	
6	2019.9.19	Male	Negative	1	Unknown	
7	2019.9.17	Female	—	1	Unknown	
8	2019.9.17	Female	Negative	1	Unknown	
9	2019.9.18	Male	Negative	1	Unknown	
10	2019.9.18	Female	—	1	Unknown	
11	2019.9.18	Female	Negative	1	Unknown	
12	2019.9.20	Male	—	1	Unknown	
13	2019.9.19	Female	Positive	2	2019.9.17	
14	2019.9.23	Male	—	2	2019.9.22	
15	2019.9.18	Male	Negative	2	Unknown	
16	2019.9.18	Male	—	2	Unknown	
17	2019.9.18	Female	Negative	2	Unknown	
18	2019.9.20	Female	Negative	2	Unknown	
19	2019.9.19	Female	Positive	3	2019.9.17	
20	2019.9.18	Male	Negative	3	Unknown	
21	2019.9.18	Female	Positive	3	Unknown	
22	2019.9.20	Female	Positive	3	Unknown	
23	2019.9.20	Male	Negative	3	Unknown	
24	2019.9.23	Female	Negative	5	2019.9.21	
25	2019.9.19	Male	Negative	7	2019.9.13	
26	2019.9.17	Male	Negative	7	Unknown	
27	2019.9.23	Female	—	8	2019.9.21	
28	2019.9.20	Female	Weakly positive	8	Unknown	
29	2019.9.12	Male	Positive	11	2019.9.12	+
30	2019.9.28	Male	Negative	16	2019.9.23	
31	2019.9.11	Male	Positive	20	2019.9.10	+
32	2019.9.26	Male	Negative	20	2019.9.21	
33	2019.9.26	Male	Negative	21	2019.9.18	
34	2019.9.18	Male	Negative	22	2019.9.15	
35	2019.10.11	Male	Positive	22	2019.10.4	
36	2019.9.26	Female	Positive	23	2019.9.22	
37	2019.9.26	Male	Negative	24	2019.9.19	
38	2019.9.30	Female	Negative	24	2019.9.22	
39	2019.10.11	Female	Negative	24	2019.10.6	
40	2019.10.21	Female	Weakly positive	24	2019.10.16	
41	2019.9.26	Female	Positive	25	2019.9.17	+
42	2019.10.17	Female	Positive	27	2019.10.11	
43	2019.9.28	Male	Positive	29	2019.9.25	+
44	2019.9.26	Female	Positive	30	2019.9.22	
45	2019.10.11	Male	Positive	31	2019.10.8	
46	2019.9.18	Male	Positive	33	2019.9.16	+
47	2019.9.11	Female	Negative	37	2019.9.7	
48	2019.9.26	Male	Negative	37	2019.9.18	
49	2019.10.17	Female	Weakly positive	40	2019.10.14	
50	2019.9.12	Female	Positive	41	2019.9.11	+
51	2019.10.17	Male	Positive	41	2019.10.13	

52	2019.9.15	Male	Positive	42	2019.9.10	
53	2019.9.30	Male	Positive	43	2019.9.25	
54	2019.10.17	Female	Positive	44	2019.10.13	
55	2019.9.26	Female	Positive	45	2019.9.20	+
56	2019.9.15	Male	Weakly positive	46	2019.09.14	
57	2019.9.26	Male	Negative	46	2019.9.16	
58	2019.9.28	Male	Positive	46	2019.9.26	
59	2019.9.28	Male	Positive	46	2019.9.24	
60	2019.9.28	Female	Positive	46	2019.9.25	
61	2019.10.21	Female	Weakly positive	46	2019.10.10	
62	2019.9.26	Male	Positive	47	2019.9.25	
63	2019.9.28	Female	Positive	48	2019.9.23	
64	2019.10.5	Female	Positive	48	2019.9.26	
65	2019.10.17	Male	Positive	48	2019.10.12	
66	2019.9.26	Female	Positive	49	2019.9.23	
67	2019.9.26	Male	Positive	49	2019.9.24	
68	2019.10.11	Male	Weakly positive	49	2019.10.5	
69	2019.9.12	Male	Weakly positive	50	2019.9.11	
70	2019.9.26	Female	Positive	50	2019.9.21	
71	2019.9.26	Female	Positive	50	2019.9.18	
72	2019.10.5	Female	Negative	50	2019.10.3	
73	2019.9.26	Female	Positive	51	2019.9.17	
74	2019.10.14	Female	Negative	52	2019.10.12	
75	2019.9.18	Male	Positive	53	2019.9.13	+
76	2019.9.30	Male	Positive	53	2019.9.24	
77	2019.9.26	Male	Positive	54	2019.9.19	
78	2019.10.14	Male	Positive	54	2019.10.9	
79	2019.9.26	Male	Negative	55	2019.9.18	
80	2019.9.26	Male	Positive	55	2019.9.20	
81	2019.9.26	Male	Positive	56	2019.9.19	
82	2019.10.14	Female	Positive	56	2019.10.11	
83	2019.9.26	Male	Positive	57	2019.9.20	
84	2019.10.14	Female	Positive	57	2019.10.12	
85	2019.10.17	Male	Positive	57	2019.10.14	
86	2019.9.26	Male	Positive	59	2019.9.21	
87	2019.10.5	Male	Positive	62	2019.9.30	
88	2019.10.21	Male	Positive	63	2019.10.17	
89	2019.9.11	Female	Weakly positive	64	2019.8.31	
90	2019.10.5	Male	Negative	64	2019.9.27	
91	2019.10.14	Female	Positive	64	2019.10.11	
92	2019.10.5	Male	Weakly positive	67	2019.9.30	
93	2019.9.12	Female	Positive	69	2019.9.4	
94	2019.10.21	Male	Positive	83	2019.10.15	
95	2019.9.18	Female	Negative	84	2019.9.15	
96	2019.9.18		Negative	Unknown	Unknown	
97	2019.9.20	Male	Negative	Unknown	Unknown	

—: The sample is insufficient for testing



Fig. S1. The morphological characteristics of *Aedes albopictus* larva. The *Aedes albopictus* larvae samples were collected from the puddles in the dumps located in the Xiuying and Longhua districts. The typical characteristics of the *Aedes albopictus* larvae were labelled with red arrows.