

Additional file 2 : Table S2. Sequence information used for the phylogenetic reconstruction of *Rickettsia* spp.

<i>Rickettsia</i> spp.	Strain	Host	Country	<i>groEL</i>	<i>rrs</i>	<i>gltA</i>	<i>17-kDa</i>	<i>ompA</i>	<i>ompB</i>
<i>Rickettsia aeschlimannii</i>	Baiyin-Ha-14	<i>Hyalomma asiaticum</i>	China	MH932043.1					
<i>Rickettsia aeschlimannii</i>	R102	tick	France			MK608596.1			
<i>Rickettsia aeschlimannii</i>	Stavropol-16	<i>Hyalomma marginatum</i>	Russia		ON721168.1				
<i>Rickettsia africae</i>	Do48F1	<i>Hyalomma dromedarii</i>	Tunisia					MN094830.1	
<i>Rickettsia africae</i>	Kankan-3/2024	<i>Amblyomma variegatum</i>	Guinea			PV261003.1			
<i>Rickettsia africae</i>	HuaAVRic5.4	<i>Amblyomma variegatum</i>	Portugal					MT085833.1	
<i>Rickettsia amblyommatis</i>	An13	<i>Amblyomma neumanni</i>	Argentina	CP015012.1				DQ517292.1	
<i>Rickettsia amblyommatis</i>	C33	chigger mites	USA				OM796109.1		
<i>Rickettsia amblyommatis</i>		tick	Eswatini			MZ351060.1			
<i>Rickettsia asembonensis</i>	PoFIRmt1	flea	Portugal						MK732016.1
<i>Rickettsia asembonensis</i>	RNMRS718	Flea	India				MN871513.1		
<i>Rickettsia asembonensis</i>	MUWRP-0062	<i>Rhipicephalus decoloratus</i>	Uganda				OP974448.1		
<i>Rickettsia asiatica</i>	NGT369-2017-Iova	<i>Ixodes ovatus</i>	Japan				LC461066.1		LC461081.1
<i>Rickettsia asiatica</i>	Iov_1277	<i>Ixodes ovatus</i>	Japan		LC379494.1	LC379441.1	LC379458.1		
<i>Rickettsia conorii</i>	MUWRP-0009	<i>Rhipicephalus decoloratus</i>	Uganda				OP974435.1		
<i>Rickettsia conorii</i>	Moroccan		Spain			PQ511235.1			
<i>Rickettsia conorii</i> subsp.	HY2	tick	China					OR944498.1	
<i>Rickettsia conorii</i> subsp.	BIME	<i>Dermacentor silvarum</i>	China	CP098324.1					
<i>Rickettsia conorii</i> subsp.	GV536	<i>Ixodes ricinus</i>	Spain						MK301599.1
<i>Rickettsia conorii</i> subsp. <i>raoultii</i>	HX-HY-17KDA-28	<i>Hyalomma</i>	China				MT795153.1		
<i>Rickettsia endosymbiont</i>	NIVEDI_2019_PK42	<i>Rhipicephalus microplus</i>	India					MN537556.1	
<i>Rickettsia felis</i>	Dog-470	dog	China		MT003287.1				
<i>Rickettsia felis</i>	Dog-8	dog	China	MT019639.1	MT003286.1	MT019627.1		MT019651.1	
<i>Rickettsia felis</i>	105_14	fleas	Chile					KY913643.1	
<i>Rickettsia felis</i>	0-OP-16-1	<i>Ctenocephalides felis</i>	Costa Rica					KX544814.1	
<i>Rickettsia felis</i>	2018rom41	<i>Amblyomma geoemdae</i>	Japan						PQ151995.1
<i>Rickettsia felis</i>	AB3572	Homo sapiens	Thailand				OR567478.1		
<i>Rickettsia felis</i>	28	<i>Ctenocephalides felis</i>	Austria					MF374382.1	
<i>Rickettsia felis</i>	Case_149	Homo sapiens	Viet Nam				OR640893.1		
<i>Rickettsia felis</i>	Case_174	Homo sapiens	Viet Nam				OR640894.1		
<i>Rickettsia felis</i>	Sirumalai	<i>Haemaphysalis intermedia</i>	India					OM675977.1	OM675973.1
<i>Rickettsia felis</i>	Vietnam 01	<i>Rhipicephalus sanguineus</i>	Vietnam			PP393500.1			
<i>Rickettsia felis</i>	scc50	<i>Carios capensis</i>	USA		DQ102712.1				
<i>Rickettsia gravesii</i>	BWI-1	<i>Amblyomma triguttatum</i>	Australia				DQ269436.1		
<i>Rickettsia helvetica</i>	Im-IZM	<i>Ixodes monospinosus</i>	Japan				LC334340.1		

<i>Rickettsia helvetica</i>	US002	Red deer	Spain					OP729875.1
<i>Rickettsia helvetica</i>	258	<i>Dermacentor reticulatus</i>	Russia		PV632059.1	GU827042.1		
<i>Rickettsia helvetica</i>	Svil2-6	<i>Ixodes ricinus</i>	Lithuania			MF491749.1		
<i>Rickettsia hoogstraalii</i>	Av202	<i>Argas transgaripepinus</i>	South Africa			MH383145.1		
<i>Rickettsia japonica</i>	WHHFXZ-13	<i>Haemaphysalis flava</i>	China	KX987376.1	KX987313.1			
<i>Rickettsia japonica</i>		Homo sapiens	Japan			LC870168.1		
<i>Rickettsia japonica</i>	HS73	<i>Haemaphysalis flava</i>	South Korea				OL687166.1	
<i>Rickettsia japonica</i>	J83	<i>Haemaphysalis longicornis</i>	China		MF496163.1	MF496180.1		MK102718.1
<i>Rickettsia lusitaniae</i>	OnP31/2019	<i>Ornithodoros porcinus</i>	Zambia				LC649693.1	
<i>Rickettsia massiliae</i>	GU037	<i>Ixodes ricinus</i>	Spain					ON859991.1
<i>Rickettsia massiliae</i>	18	<i>Rhipicephalus turanicus</i>	Lebanon				KY233204.1	KY233237.1
<i>Rickettsia massiliae</i>	30gltA	tick	Portugal		PX438758.1			
<i>Rickettsia monacensis</i>	M61	<i>Ixodes ricinus</i>	Portugal		OR399958.1			
<i>Rickettsia monacensis</i>	GU034	<i>Rhipicephalus sanguineus</i>	Spain					ON859995.1
<i>Rickettsia monacensis</i>	KY088_Cl.6	nymph	Thailand		OR523981.1			
<i>Rickettsia montanensis</i>	OSU	<i>Cavia porcellus</i>	USA				MT035857.1	
<i>Rickettsia parkeri</i>	RparkeriAm24	<i>Amblyomma maculatum</i>	Ecuador					OR885265.1
<i>Rickettsia parkeri</i>	RPDPMEX	tick	Mexico			MG578512.1	MG578509.1	MG578510.1
<i>Rickettsia peacockii</i>	CAA484	<i>Dermacentor andersoni</i>	Canada		HF935070.1	HF935076.1		
<i>Rickettsia raoultii</i>		tick	Khabarovsk	CP010969.1				
<i>Rickettsia raoultii</i>		Homo sapiens	Italy					KC847318.1
<i>Rickettsia raoultii</i>		<i>Haemaphysalis erinacei</i>	China		KR608783.1			
<i>Rickettsia rhipicephali</i>	RrMG	<i>Amblyomma sp.</i>	Brazil				KX018049.1	
<i>Rickettsia rhipicephali</i>	HJ5	<i>Haemaphysalis juxtakochi</i>	Brazil			DQ865207.1	DQ865208.1	
<i>Rickettsia rhipicephali</i>	ban2_DE_D90_PYG_39		China		MT903193.1			
<i>Rickettsia rickettsii</i>	Crystal Cove	<i>Dermacentor occidentalis</i>	USA	CP130462.1				
<i>Rickettsia rickettsii</i>	Colatina1	<i>Amblyomma cajennense nymph</i>	Brazil			KC845924.1	KC845925.1	
<i>Rickettsia rickettsii</i>	1991CO3	<i>Canis familiaris</i>	USA		DQ150685.1			
<i>Rickettsia rickettsii str.</i>	Iowa		USA	CP000766.3				
<i>Rickettsia sibirica</i>	O53	<i>Dermacentor silvarum</i>	China	CP170619.1				
<i>Rickettsia sibirica subsp. mongolitimonae</i>	GU079	<i>Ixodes frontalis</i>	Spain					ON859993.1
<i>Rickettsia slovaca</i>	E172	<i>Dermacentor marginatus</i>	Spain		MW835778.1			
<i>Rickettsia slovaca</i>	TPU051	<i>Hyalomma lusitanicum</i>	Spain					OP729870.1
<i>Rickettsia tamurae</i>	KY020_Cl.15	nymph	Thailand		OR523963.1			
<i>Rickettsia typhi</i>	2020-CO-Texas	<i>Canis lupus familiaris</i>	USA			OK073987.1		
<i>Rickettsia typhi</i>	F31	<i>Ctenocephalides felis</i>	USA		PP856021.1			
<i>Rickettsia typhi</i>	Wilmington		USA	L36221.1				
<i>Rickettsia typhi</i>	KRS13	<i>Ctenophthalmus congeneroides</i>	South Korea					HQ236390.1

<i>Rickettsia vini</i>	Boshhoek1	<i>Ixodes arboricola</i>	Belgium	MT062904.1		MT062907.1	
<i>Rickettsia vini</i>	I.L.-LT	<i>Ixodes lividus</i>	Lithuania			MN078337.1	
<i>Rickettsia</i> sp.	Hainan 1		China	EU402925.1			
Candidatus <i>Rickettsia davousti</i>		<i>Amblyomma tholloni</i> tick	Gabon			DQ402517.1	
Candidatus <i>Rickettsia jingxinensis</i>	tick-XA188	<i>Haemaphysalis longicornis</i>	China	MH500219.1	MH500199.1		
Candidatus <i>Rickettsia jingxinensis</i>	Meixian-HI-11	<i>Haemaphysalis longicornis</i>	China	MH932047.1	MH923220.1	MH932032.1	MH932062.1
Candidatus <i>Rickettsia jingxinensis</i>	Xian-HI-141	<i>Haemaphysalis longicornis</i>	China		MH923225.1	MH932037.1	MH932067.1
Candidatus <i>Rickettsia jingxinensis</i>	TIGMIC-194	<i>Haemaphysalis longicornis</i>	China			PP117207.1	PP117714.1
Candidatus <i>Rickettsia jingxinensis</i>	PT3-2	tick	China			PQ133370.1	
Candidatus <i>Rickettsia jingxinensis</i>	Patient_9	Homo sapiens	China				PP922939.1
Candidatus <i>Rickettsia jingxinensis</i>	Patient_1	Homo sapiens	China			PP922920.1	PP922931.1
Candidatus <i>Rickettsia jingxinensis</i>	2018rom88	<i>Amblyomma geoemdae</i>	Taiwan				PQ151996.1
Candidatus <i>Rickettsia jingxinensis</i>	TIGMIC-186	<i>Haemaphysalis longicornis</i>	China			PP117214.1	PP117694.1
Candidatus <i>Rickettsia jingxinensis</i>	HBSJZJX40	<i>Haemaphysalis longicornis</i>	China		OQ702261.1		
Candidatus <i>Rickettsia jingxinensis</i>	Zhaotong-168	tick	China	OL855736.1	OL856122.1		OL856112.1
<i>Orientia tsutsugamushi</i>	UT125	Homo sapiens	Thailand	EF551293.1			MH168006.1
<i>Orientia tsutsugamushi</i>		Homo sapiens	Australia	AF062074.1			