

Supplementary file for: Elsterová J., Černý J., Müllerová J., Šíma R., Coulson S.J., Erlend Lorentzen E., Strøm H. & Grubhoffer L. 2015. Search for tick-borne pathogens in the Svalbard Archipelago and Jan Mayen. *Polar Research* 34. Correspondence: Jiří Černý, Institute of Parasitology, Biology Centre of the Academy of Sciences of the Czech Republic, Branišovská 31, CZ-37005 České Budějovice, Czech Republic. E-mail: cerny@paru.cas.cz

**Supplementary Table S1.** Samples.

#	Ticks	Source/host	Date	Island	Locality	Position
1	9 ticks (nymphs and unfed females)	human clothes	24 June 2010	Bjørnøya	Kapp Kolthoff	78.952027, 12.474062
2	2 ticks (fed female, male)	human clothes	17 June 2010	Bjørnøya	Kapp Kolthoff	78.952027, 12.474062
3	9 ticks (7 nymphs, 2 males)	<i>Uria lomvia</i>	19 June 2008	Spitsbergen	Ossian Sarsfjellet	74.367023, 19.163853
4	3 ticks (1 fed female, 2 nymphs)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
5	1 tick (fed female)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
6	2 ticks (1 unfed male, 1 nymph)	<i>Uria aalge</i>	6 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
7	1 tick (fed female)	<i>Uria aalge</i>	6 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
8	2 ticks (males)	<i>Uria aalge</i>	6 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
9	2 ticks (1 fed female, 1 male)	<i>Uria aalge</i>	12 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
10	2 ticks (1 fed and 1 unfed female)	<i>Uria aalge</i>	12 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
11	3 ticks (1 fed and 1 unfed female, 1 male)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
12	3 ticks (1 fed female, 1 male, 1 nymph)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
13	3 ticks (fed females)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
14	2 ticks (1 fed female, 1 male)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
15	3 ticks (1 male, 2 nymphs)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
16	3 ticks (1 fed female, 2 nymphs)	<i>Uria lomvia</i>	8 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
17	2 ticks (males)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
18	3 ticks (1 unfed female, 2 males)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056

19	3 ticks (1 fed female, 1 male, 1 nymph)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
20	3 ticks (2 fed female, 1 male)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
21	3 ticks (2 fed and 1 unfed female)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
22	3 ticks (2 fed and 1 unfed female)	<i>Uria aalge</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
23	2 ticks (1 fed female, 1 male 1 nymph)	<i>Uria aalge</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
24	3 ticks (1 fed and 1 unfed female, 1 male)	<i>Uria aalge</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
25	3 ticks (1 unfed female, 2 males)	<i>Uria aalge</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
26	3 ticks (2 fed and 1 unfed female)	<i>Uria aalge</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
27	3 ticks (unfed felames)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
28	3 ticks (2 fed and 1 unfed female)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056
29	4 ticks (unfed females)	<i>Uria lomvia</i>	16 July 2012	Jan Mayen	Skrinnodden	70.977778, -8.323056

**Supplementary Table S2. Primers.**

Primer name	Primer sequence	Melting temp. (°C)	Target	Amplicone length (bp)	Source
ActRT_F	CGCCATCCTCCGTCTGGACTT	58.3	tick actin	91	P. Věchtová
ActRT_R	CGTCGGGAAGCTCGTAGGACTT	58.6			
EF1exexRT F	CGCCTGGGTGTTGGACAAGCTGAA	60.8	tick EF1-alpha	166	P. Věchtová
EF1exexRT R	CGCAGTCGGCCTGGGAGGTA	60			
FlaF1A	AGCAAATTTAGGTGCTTTCCAA	49.2	<i>Borrelia flagelin</i>	154	Schwaiger et al. 2001
FlaR1	GCAATCATTGCCATTGCAGA	49.7			
CRYPTOF	AACCTGGTTGATCCTGCCAGTAGTCAT	59.7	<i>Babesia</i> 18S rRNA	1188	Malandrin et al. 2010
CRYPTOR	GAATGATCCTCCGCAGGTTACCTAC	61.3			
BABGF2	GYTTTGTAATTGGAATGATGG	50.5	<i>Babesia</i> 18S rRNA	559	Malandrin et al. 2010
BABGR2	CCAAAGACTTTGATTTCTCTC	48.5			
Alpha+	GAYGCITAYYTIGAYATGGTIGAIGG	59.5	genus <i>Alphavirus</i>	481	Sánchez-Seco et al. 2001
Alpha-	KYTCYTCIGTRTGYTTIGTICIGG	61			
MAMD	AACATGATGGGRAARAGRGARAA	55.3	genus <i>Flavivirus</i>	252	Scaramozzino et al. 2001
CFD2	GTGTCCAGCCGGCGGTGTCATCAGC	67.4			
Nphlebo 1+	ATGGARGGITTGTIWSICIIC	53.5	genus <i>Phlebovirus</i>	554	Charrel et al. 2006
Nphlebo 1-	AARTTRCTIGWIGCYTTIARIGTIGC	56.4			
BCS82C	ATGACTGAGTTGGAGTTTCATGATGTCGC	60.1	genus <i>Orthobunyavirus</i>	251	Kuno et al. 1996
BCS332V	TGTTCTGTGGCCAGGAAAAT	50,5			
OrbiVP1-F2494-3	TCGGAACARTAYGTVGGNGAYGATA	61	genus <i>Orbivirus</i>	188	Palacios et al. 2011
OrbiVP1-R2682	CCYTGYYTNGCRTGNGTYTGYGTYTTYTC	68.6			

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