Table S1. Summary of haplotype diversity in the sampling localities. *N* is the number of individuals sequenced, *H* is the number of different halotypes. The number of main haplotypes and common derived haplotypes are shown in separate columns, unique derived haplotpes are listed for each locality (haplotype symbol) (the number of individuals, if > 1).

	Locality	*N*	*H*	Main haplotypes			Common derived haplotypes										Unique derived haplotypes
				Rindhovda	Rudihoe	Utsjoki	H1C458T	H1A605G	H1G608A	H1G183A	H1A461G	H2T191G	H2C347T	H2A566T	H2A581G	H2C636T	
				H1	H2	H3	H9	H13	H15	H21	H37	H5	H8	H10	H12	H25	
	Norway																
1	Finnmark, Šuoššjávri	32	2	23	9												
2	Rudihøe	36	7	6	18			2				4	3	2			H1A92G(H4)
3	Kvernbrusætrin	24	7	1	15		1					4		1	1		H2T191G+C599T(H6)
4	Stålane	24	**9**	5	6		5	3	1			1					H1G320A(H7), H2A566T+T319C(H11), H1A605G+C218T(H14)
5	Kringlothaugen	22	6	1	13		1					5	1		1		
6	Rindhovda 1080	30	**6**	13	4		4		1			4	4				
		168	**14**	49	65		11	5	2			18	8	3	2		
	Sweden																
7	Abisko, Björkliden Fjället	22	2	5	17												
8	Abisko, Lapporten 570	28	2	23	5												
9	Soppero	21	2	1	20												
10	Jokkmokk	25	2		24												H2G11A(H16)
11	Sorsele	26	2		26												
12	Storuman	21	3	2	17							2					
		143	**4**	31	109							2					
	Finland																
13	Utsjoki, Ailigas	45	3	25		1											H1C98T(H17) (19)
14	Utsjoki, Hietala	24	1	24													
15	Utsjoki, Karigasniemi	17	2	10	7												
16	Kilpisjärvi, Pikku-Malla	17	3	9	6												H1A563G(H23) (2)
17	Sodankylä, Pusuvanto	18	2	6	12												
18	Sodankylä	12	1		12												
19	Salla, Tuntsa	14	2	7	7												
20	Kuusamo	18	1		18												
21	Liminka	28	5	13	1					12							H1A182G(H20), H1T501A(H22)
22	Paltamo	50	6	13	25					7						3	H3C146T(H18), H3C146T+G11A(H19)
23	Juuka	12	**3**		10											1	H2T569G(H24)
24	Suonenjoki	6	1		6												
25	Tohmajärvi	18	1		18												
26	Forssa	4	1		4												
		283	**12**	107	126	1				19						4	
	Russia																
27	Kildin Island	27	3	2	24												H2A299G(H33)
28	Murmansk, North Nagornoje	20	2	17	3												
29	Murmansk, Kola	18	3	12	5												H2A461G(H38)
30	Murmansk, Laplandskii Reserve	32	**3**	30			1			1							
31	Apatity	20	4	13	5					1							H1T319C(H34)
32	Vorkuta	30	2	29	1												
33	Island Malyi Gorelyi (White Sea)	16	1		16												
34	Island Bolshoy Gorely (White Sea)	3	1		3												
35	White Sea, mainland	33	8	1	26											1	H2A17G(H26), H2A17G+T478C(H27), RuC185T(H30), H2C185T+A311G(H31), H3G224A+C254T(H32)
36	Island Sredniy (White Sea)	41	4	2	37												H2C63G(H28), H2G83A(H29)
37	Kartesh (White Sea)	3	1		3												
38	Arkhangel	26	3		23												H3G372A(H36) (2), H1C466A(H39)
39	Kostamuksha	2	1		2												
40	Syktyvkar	12	2	11	1												
41	Tomsk	2	1	2													
42	Magadan	30	2	26													H1C323T(H35) (4)
43	Kemerovo	27	2		26											1	
		342	**17**	145	175		1			2						2	
	Czech Republic																
44	Krušne Hory 1	12	1		12												
45	Krušne Hory 2	10	2		9												H2A461C(H40)
		22	**2**		21												
	Bulgaria																
46	Rila Mountains	4	1		4												
		4	**1**		4												