**Haplotype sequences and respective segregation sites**

Hap\_1 TGACCTATCAACATTTCCATACAAACGAAGCTATATCTCCATAACGCCAGCCGAAAGCATGCTATAATATCGAGCTA

Hap\_2 ...........T..................................................C..............

Hap\_3 ............................................................................G

Hap\_4 ...........T.................................................................

Hap\_5 ...........T................G................................................

Hap\_6 ...........T..............................G..................................

Hap\_7 ...........T.................A................................C..............

Hap\_8 ...........T...........G.....A................................C..............

Hap\_9 ...........T..........G..................................T....C..............

Hap\_10 ..................................T.................................G........

Hap\_11 ..G........T..................................................C..............

Hap\_12 ...........T............................................AT...................

Hap\_13 ...............C............................................................G

Hap\_14 ..........................................................G..................

Hap\_15 ...........T..................................................C...G..........

Hap\_16 ..........................A.................................................G

Hap\_17 ...........T..................................................C.C............

Hap\_18 ...........T..C..............................................................

Hap\_19 .......................................................G.....................

Hap\_20 ...........................G.................................................

Hap\_21 ............................G................................................

Hap\_22 ....................................................A........................

Hap\_23 ...........T.....................................A...........................

Hap\_24 ...........T..............................................................T..

Hap\_25 ..........G..................................................................

Hap\_26 ...........T........................................A.........C..............

Hap\_27 ......................................T......................................

Hap\_28 ...........TC................................................................

Hap\_29 ..............................................T..............................

Hap\_30 ...................................................................C.........

Hap\_31 ...............................................T.............................

Hap\_32 ...........T........G.........................................C..............

Hap\_33 ...........T.......C..........................................C..............

Hap\_34 ...........T..................T...............................C..............

Hap\_35 ...........T.............................................T....C..............

Hap\_36 ...........T................G.................................C..............

Hap\_37 ...........T..................................................C...........T..

Hap\_38 ...........T..................G..............................................

Hap\_39 ...........T....A............................................................

Hap\_40 ...........T........................................A........................

Hap\_41 .A...........................................................................

Hap\_42 ......................................................G......................

Hap\_43 ................................T............................................

Hap\_44 .............................................................T...............

Hap\_45 .................................................................G...........

Hap\_46 ....................................T........................................

Hap\_47 .........................................................T..................G

Hap\_48 ..G.........................................................................G

Hap\_49 ...........................................G................................G

Hap\_50 .....................T......................................................G

Hap\_51 .......................................T..................G..................

Hap\_52 ....T.....................................................G..................

Hap\_53 ...............................C...................................C.........

Hap\_54 ...........T..................................T......G.......................

Hap\_55 ..........................................G...........................A......

Hap\_56 ...................................................T.........................

Hap\_57 .....................................................................C.......

Hap\_58 ..........G...............................................G..................

Hap\_59 ........G..T....................................C....G........C..............

Hap\_60 ...........................................................................A.

Hap\_61 ...........T............G.....................................C..............

Hap\_62 .....................................................G.............C.........

Hap\_63 ...........T.............................CG..................................

Hap\_64 ...........T.......................C................A.........C..............

Hap\_65 ....................................................................G........

Hap\_66 ..G........T.................................................................

Hap\_67 .................T........................................G..................

Hap\_68 ...........T.........................C.......................................

Hap\_69 ...........T.....................C............................C..............

Hap\_70 ...........T................................................A................

Hap\_71 ...........T.................A................................C..........A...

Hap\_72 ..........................A..................................................

Hap\_73 ...........T.....................................A......................G....

Hap\_74 ...........T...........G.......................T..............C..............

Hap\_75 ..................G.....................................A...................G

Hap\_76 ...........T..................................................C........A.....

Hap\_77 ...........T................................T.................C..............

Hap\_78 ...........T................................................A.C..............

Hap\_79 ...........T..................................................C.......T......

Hap\_80 ....T......T..............................................G..................

Hap\_81 ..................G.........................................................G

Hap\_82 ....T.....................A...............................G..................

Hap\_83 ..................................................T..........................

Hap\_84 .........T...................................................................

Hap\_85 ...T.......T..................................................C..............

Hap\_86 C............................................................................

Hap\_87 ...........................................................C.................

Hap\_88 .....C......................................................A..G............G

Hap\_89 .............G..........C....................................................

Hap\_90 ......G....T..................................................C..............

Hap\_91 ......................................................................A.....G

Hap\_92 ..........................A...............................G..................

Hap\_93 ........................................G....................................

Hap\_94 ...................................................................CG........

Hap\_95 ...........T.............................................T...................

Hap\_96 ...........T..............A...................................C..............

Hap\_97 ......................................................................T......

Hap\_98 .................A...........................................................

Hap\_99 .........................T................................G..................

Hap\_100 ...........T................G....................A...........................

Hap\_101 ...........T.................................A...............................

Hap\_102 .......C...T..................................................C..............

**Haplotypes distribution amongst sampled locations**

[Hap\_1: 215 AD2010\_01 AD2010\_05 AD2010\_07 AD2010\_11 AD2010\_13 AD2010\_14 AD2010\_16 AD2010\_17 AD2010\_18 AD2010\_19 AD2010\_20 AD2010\_25 AD2010\_26 AD2010\_29 AD2010\_30 AD2010\_31 AD2010\_38 AD2010\_41 AD2010\_42 AD2010\_46 AD2010\_48 AD2010\_50 AD2010\_51 AD2010\_53 AD2010\_58 AD2010\_60 AD2010\_61 AD2010\_63 AD2010\_64 AD2010\_68 AD2010\_69 AD2010\_70 AD2010\_71 AD2010\_77 AD2010\_80 AD2010\_81 AD2010\_103 AD2010\_105 AD2010\_109 AD2010\_111 AD2010\_116 AD2010\_131 AD2010\_132 AD2010\_134 AD2010\_137 AD2010\_138 AD2010\_141 AD2010\_142 AD2010\_147 AD2010\_159 AD2010\_86 AD2010\_88 AD2010\_93 AD2010\_98 AD2010\_89 AD2011\_78 AD2011\_79 AD2011\_109 AD2011\_136 AD2011\_138 AD2011\_142 AD2011\_157 AD2011\_159 AD2011\_17 AD2011\_24 AD2011\_30 AD2011\_32 AD2011\_34 AD2011\_3 AD2011\_41 AD2011\_42 AD2011\_43 AD2011\_48 AD2011\_52 AD2011\_53 AD2011\_54 AD2011\_56 AD2011\_61 AD2011\_62 AD2011\_65 AD2011\_66 AD2011\_69 AD2011\_6 AD2011\_82 AD2011\_85 AD2011\_87 AD2011\_89 AD2011\_90 AD2011\_97 AD2011\_9 AD2012\_06 AD2012\_08 AD2012\_102 AD2012\_103 AD2012\_11 AD2012\_118 AD2012\_119 AD2012\_120 AD2012\_121 AD2012\_132 AD2012\_134 AD2012\_135 AD2012\_136 AD2012\_138 AD2012\_139 AD2012\_147 AD2012\_15 AD2012\_152 AD2012\_19 AD2012\_23 AD2012\_30 AD2012\_32 AD2012\_34 AD2012\_39 AD2012\_61 AD2012\_72 AD2012\_73 AD2012\_75 AD2012\_76 AD2012\_79 AD2012\_80 AD2012\_83 AD2012\_84 AD2012\_85 AD2012\_86 AD2012\_95 AD2012\_97 LC09 LC98 LC79 Q09 Q47 Q52 Q48 Q03 Q51 Q39 Q05 Q02 BU19 BU13 BU01 BU54 BU06 BU52 BU38 BT10 BT12 BT20 BT16 LC12 BL06 SLC03 SLC01 SLC11 SLCO9 LL50 LL37 SLB08 SLB16 GL03 GL62 GL01 BL05 BL11 Dk12 Dk02 Dk28 Dk08 FI15 FI16 FI18 FI05 P12 P19 P21 P30 WK171 Wk236 Wk287 Wk289 P11 DK25 BT09 BT11 BU07 BU20 BU35 LC10 SLB02 SLB03 CH-B-IRL1 CH-B-IRL11 CH-B-IRL3 CH-B-IRL8 CH-B-IRL9 CH-B-NIRL4 CH-B-NIRL6 CH-B-NIRL9 CH-C-NIRL2 CH-E-GER1 CH-E-GER2 CH-O-SPA4 CH-T-ENG10 CH-T-ENG2 CH-T-ENG5 CH-V-SWE10 CH-V-SWE11 CH-V-SWE15 CH-V-SWE16 CH-V-SWE6 CH-V-SWE8 CH-V-SWE9 CH-W-ENG1 CH-W-ENG3]

[Hap\_2: 143 AD2010\_02 AD2010\_04 AD2010\_15 AD2010\_21 AD2010\_22 AD2010\_24 AD2010\_28 AD2010\_32 AD2010\_39 AD201043 AD2010\_44 AD2010\_49 AD2010\_56 AD201066 AD2010\_78 AD2010\_82 AD2010\_112 AD2010\_113 AD2010\_117 AD2010\_120 AD2010\_127 AD2010\_136 AD2010\_149 AD2010\_156 AD2010\_162 AD2010\_92 AD2010\_94 AD2011\_101 AD2011\_84 AD2011\_102 AD2011\_107 AD2011\_111 AD2011\_12 AD2011\_132 AD2011\_134 AD2011\_137 AD2011\_140 AD2011\_143 AD2011\_146 AD2011\_14 AD2011\_19 AD2011\_20 AD2011\_27 AD2011\_2 AD2011\_35 AD2011\_40 AD2011\_45 AD2011\_47 AD2011\_4 AD2011\_51 AD2011\_67 AD2011\_70 AD2011\_93 AD2011\_94 AD2011\_99 AD2012\_09 AD2012\_101 AD2012\_107 AD2012\_113 AD2012\_114 AD2012\_115 AD2012\_117 AD2012\_14 AD2012\_143 AD2012\_16 AD2012\_22 AD2012\_29 AD2012\_40 AD2012\_44 AD2012\_59 AD2012\_60 AD2012\_66 AD2012\_68 AD2012\_70 AD2012\_71 AD2012\_77 AD2012\_90 AD2012\_92 AD2012\_93 LC11 LC03 LC77 LC04 Q50 BU22 BU11 BT02 BT05 LC07 LC63 BT07 BL09 BL10 LL25 LL52 LL09 LL17 LL05 SLB14 GL02 GL58 GL53 Dk19 Dk09 FI02 FI22 FI31 FI06 FI08 P17 P08 Wk213 Wk229 Wk237 Wk249 Wk267 Wk275 Wk290 P28 P07 P23 BL01 BT18 BU48 BU55 LC02 LC06 SLB10 SLB13 CH-B-IRL14 CH-B-IRL15 CH-B-IRL4 CH-B-IRL6 CH-B-IRL7 CH-B-NIRL1 CH-B-NIRL10 CH-B-NIRL5 CH-C-NIRL3 CH-E-GER3 CH-T-ITA4 CH-T-ITA5 CH-V-SWE5 CH-W-ENG5]

[Hap\_3: 36 AD2010\_03 AD2010\_10 AD2010\_40 AD2010\_67 AD2010\_73 AD2010\_139 AD2010\_143 AD2010\_90 AD2011\_73 AD2011\_7 AD2011\_141 AD2011\_15 AD2011\_29 AD2011\_36 AD2011\_80 AD2012\_04 AD2012\_133 AD2012\_142 AD2012\_145 AD2012\_149 AD2012\_82 BT19 BL13 SLC02 SLB15 SLB07 Dk23 Dk29 FI09 P20 Wk244 P22 P24 SLC10 CH-V-SWE14 CH-V-SWE2]

[Hap\_4: 87 AD2010\_06 AD2010\_08 AD2010\_09 AD2010\_23 AD2010\_27 AD2010\_34 AD2010\_36 AD2010\_37 AD2010\_52 AD2010\_57 AD2010\_75 AD2010\_79 AD2010\_101 AD2010\_102 AD2010\_104 AD2010\_106 AD2010\_107 AD2010\_118 AD2010\_119 AD2010\_121 AD2010\_129 AD2010\_163 AD2010\_85 AD2010\_91 AD2011\_10 AD2011\_110 AD2011\_103 AD2011\_106 AD2011\_153 AD2011\_21 AD2011\_26 AD2011\_33 AD2011\_39 AD2011\_44 AD2011\_50 AD2011\_57 AD2011\_83 AD2011\_91 AD2011\_92 AD2011\_96 AD2012\_05 AD2012\_106 AD2012\_110 AD2012\_111 AD2012\_128 AD2012\_137 AD2012\_144 AD2012\_18 AD2012\_27 AD2012\_33 AD2012\_45 AD2012\_64 AD2012\_74 AD2012\_81 AD2012\_96 LC86 LC58 LC01 LC05 Q11 Q46 BT06 BL07 BL04 LL42 LL04 LL11 SLB05 SLB11 SLB06 GL64 BL02 FI11 FI23 P25 Wk210 Wk238 Wk245 SLB12 CH-E-GER5 CH-O-SPA2 CH-O-SPA5 CH-T-ENG1 CH-T-ITA1 CH-V-SWE1 CH-VILL1 CH-VILL4]

[Hap\_5: 6 AD2010\_12 AD2010\_153 AD2012\_104 AD2012\_69 CH-B-NIRL7 CH-W-ENG2]

[Hap\_6: 10 AD2010\_33 AD2010\_154 AD2011\_38 AD2012\_108 AD2012\_28 BT13 BL08 GL52 FI17 CH-O-SPA3]

[Hap\_7: 11 AD2010\_35 AD2010\_110 AD2010\_99 AD2011\_118 AD2011\_139 AD2011\_18 AD2011\_60 AD2012\_41 BT15 CH-B-IRL10 CH-C-NIRL1]

[Hap\_8: 1 AD2010\_45]

[Hap\_9: 1 AD2010\_47]

[Hap\_10: 1 AD2010\_54]

[Hap\_11: 7 AD2010\_55 AD2011\_130 AD2011\_13 AD2012\_78 LL16 Dk06 FI32]

[Hap\_12: 3 AD2010\_62 AD2010\_144 AD2012\_57]

[Hap\_13: 1 AD2010\_65]

[Hap\_14: 35 AD2010\_100 AD2010\_114 AD2010\_135 AD2010\_151 AD2010\_157 AD2010\_164 AD2010\_87 AD2010\_96 AD2011\_104 AD2011\_81 AD2011\_105 AD2011\_108 AD2011\_37 AD2011\_49 AD2012\_122 AD2012\_140 AD2012\_141 AD2012\_146 AD2012\_21 AD2012\_38 Q07 Q17 LL43 Dk21 Dk26 FI20 FI21 FI25 CH-B-IRL13 CH-E-GER4 CH-T-ENG6 CH-T-ENG8 CH-V-SWE13 CH-V-SWE7 CH-VILL3]

[Hap\_15: 1 AD2010\_115]

[Hap\_16: 1 AD2010\_122]

[Hap\_17: 1 AD2010\_124]

[Hap\_18: 1 AD2010\_125]

[Hap\_19: 1 AD2010\_126]

[Hap\_20: 1 AD2010\_128]

[Hap\_21: 1 AD2010\_130]

[Hap\_22: 5 AD2010\_133 AD2010\_148 BU24 GL57 DK30]

[Hap\_23: 9 AD2010\_140 AD2011\_100 AD2011\_98 AD2011\_86 AD2012\_105 AD2012\_131 LL15 GL61 P18]

[Hap\_24: 5 AD2010\_145 AD2011\_158 AD2011\_64 FI01 SLC08]

[Hap\_25: 1 AD2010\_146]

[Hap\_26: 2 AD2010\_150 AD2010\_160]

[Hap\_27: 3 AD2010\_152 AD2011\_11 AD2012\_87]

[Hap\_28: 1 AD2010\_155]

[Hap\_29: 2 AD2010\_161 Dk07]

[Hap\_30: 3 AD2010\_84 AD2012\_42 LC83]

[Hap\_31: 1 AD2010\_97]

[Hap\_32: 1 AD2011\_129]

[Hap\_33: 1 AD2011\_46]

[Hap\_34: 1 AD2011\_63]

[Hap\_35: 2 AD2011\_76 CH-V-SWE4]

[Hap\_36: 1 AD2011\_8]

[Hap\_37: 1 AD2011\_133]

[Hap\_38: 1 AD2011\_112]

[Hap\_39: 1 AD2011\_155]

[Hap\_40: 1 AD2011\_75]

[Hap\_41: 1 AD2011\_131]

[Hap\_42: 1 AD2011\_135]

[Hap\_43: 1 AD2011\_16]

[Hap\_44: 4 AD2011\_71 AD2012\_148 Dk03 CH-T-ITA3]

[Hap\_45: 1 AD2011\_74]

[Hap\_46: 2 AD2011\_22 AD2011\_28]

[Hap\_47: 1 AD2011\_1]

[Hap\_48: 1 AD2011\_59]

[Hap\_49: 1 AD2011\_55]

[Hap\_50: 1 AD2011\_77]

[Hap\_51: 1 AD2011\_58]

[Hap\_52: 3 AD2011\_68 AD2012\_150 BT17]

[Hap\_53: 1 AD2011\_5]

[Hap\_54: 1 AD2011\_23]

[Hap\_55: 2 AD2012\_02 GL55]

[Hap\_56: 2 AD2012\_03 CH-B-NIRL12]

[Hap\_57: 1 AD2012\_112]

[Hap\_58: 1 AD2012\_116]

[Hap\_59: 1 AD2012\_12]

[Hap\_60: 1 AD2012\_125]

[Hap\_61: 2 AD2012\_126 AD2012\_20]

[Hap\_62: 1 AD2012\_17]

[Hap\_63: 1 AD2012\_24]

[Hap\_64: 1 AD2012\_25]

[Hap\_65: 1 AD2012\_31]

[Hap\_66: 1 AD2012\_48]

[Hap\_67: 1 AD2012\_62]

[Hap\_68: 1 AD2012\_63]

[Hap\_69: 1 AD2012\_65]

[Hap\_70: 2 AD2012\_67 CH-V-SWE3]

[Hap\_71: 1 AD2012\_88]

[Hap\_72: 1 AD2012\_89]

[Hap\_73: 2 AD2012\_94 BT04]

[Hap\_74: 1 Q01]

[Hap\_75: 1 BU12]

[Hap\_76: 1 BT08]

[Hap\_77: 3 SLC05 DK11 SLB01]

[Hap\_78: 1 SLC04]

[Hap\_79: 2 SLB09 CH-B-NIRL2]

[Hap\_80: 1 GL63]

[Hap\_81: 2 GL51 Dk17]

[Hap\_82: 1 GL60]

[Hap\_83: 1 Dk24]

[Hap\_84: 1 Dk05]

[Hap\_85: 1 FI14]

[Hap\_86: 1 WK203]

[Hap\_87: 1 Wk252]

[Hap\_88: 1 Dk04]

[Hap\_89: 1 P27]

[Hap\_90: 1 P16]

[Hap\_91: 1 LC76]

[Hap\_92: 1 CH-B-IRL12]

[Hap\_93: 1 CH-B-IRL5]

[Hap\_94: 1 CH-B-NIRL11]

[Hap\_95: 1 CH-B-NIRL3]

[Hap\_96: 1 CH-B-NIRL8]

[Hap\_97: 1 CH-T-ENG3]

[Hap\_98: 1 CH-T-ENG4]

[Hap\_99: 1 CH-T-ENG7]

[Hap\_100: 1 CH-T-ENG9]

[Hap\_101: 1 CH-V-SWE12]

[Hap\_102: 1 CH-W-ENG4]