

Supplementary table 1 : PCR and sequencing conditions for screening lymphedema genes.

FLT4					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
17	FLT4-ex17-F	CCACAGTGGTATGGCCAAATC	269	62	With betain 1M
	FLT4-ex17-R	GATTCAGGCACTCCGGCCTG			
18	FLT4-ex18-F	ACCTGTCTCCACGCTCACC	210	56	With betain 1M
	FLT4-ex18-R	CTGCTCTCACCAGCTAGG			
19	FLT4-ex19-F	GAACGGGGACCTGCCAGGG	203	66	With betain 1M
	FLT4-ex19-R	GGGGTCTCGCCGTCACAGC			
20	FLT4-ex20-F	CGCGGGTGCAAACGCGGAGC	270	60	With betain 1M
	FLT4-ex20-R	CCAGTCGTCCGCCGAGAG			
21	FLT4-ex21-F	TCTGCGGGGACGACTGG	243	62	With betain 1M
	FLT4-ex21-R	GGCCCCGTCAGGCACTAGG			
22	FLT4-ex22-F	CTGGGGCTGGGTAGATGG	210	64	-
	FLT4-ex22-R	GTGGGGATGCACCCTTTTCC			
23	FLT4-ex23-F	GGTGTGGGTATTACCCAGG	216	64	-
	FLT4-ex23-R	ACGTTCCCTCTCCTCAATGG			
24	FLT4-ex24-F	AGCTTCCCTCTGTCTCCCCAG	192	64	With betain 1M
	FLT4-ex24-R	GTAACCTGCCGCCAGTGACC			
25	FLT4-ex25-F	AGCCCGAGGAGGCTTGCTC	190	66	-
	FLT4-ex25-R	CGCTTGCTGTCCCCAAAACC			
GJC2					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1	GJC2-AF	AGGCGGTAAGCTCCACGTCATT	1759	59,5	GC-RICH PCR System, Roche
	GJC2-AR	CAGTGGTGACCAAGCCAG			
Additional sequencing primers :	GJC2-SEQ-1	GCGTAGCCCAAGTACATGA			
	GJC2-SEQ-2	CATCTCACAGAGGTTGAG			
	GJC2-SEQ-3	AGGTTTGCCAGGTTCTGG			
	GJC2-SEQ-4	AGAAGGGTTCGAGGTTTC			
FOXC2					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1-Amplicon 1	FOXC2-F1	GCGAGCCGTCTCGGAAGC	1042	63	Taq DNA Polymerase + Q-Solution, Qiagen
	FOXC2-R6	CGGTGTACAGGCTCATCCG			
Additional sequencing primers :	FOXC2-F3	GCTGGCAGAACAGCATCCG			
	FOXC2-R2	CTTGACGAAGCACTCGTTGAG			
1-Amplicon 2	FOXC2-F6	CTGCCTGGGTTACAGCGTG	783	57	Taq DNA Polymerase + Q-Solution, Qiagen
	FOXC2-R10	CCCTTAAITGTCTGGTITGGG			
Additional sequencing primers :	FOXC2-F8	CTGAGCGCTCTCAACCTCG			
	FOXC2-R7	GGTGCTGGTGGTGGTGCC			
SOX18					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1	SOX18-ex1-F1	AGCACCGGCCCTCATCAGCAG	1006	54	With Betain 1M and DMSO 3%
	SOX18-ex1-R10	GCCAGTGAGTGAACGCCGTC			
Additional sequencing primers :	SOX18-ex1SEQ-F1	TGAGCCGCTATATCTGGGGC			
	SOX18-ex1SEQ-F4	CCAGCTGGAATGCAGAGATCG			
2	SOX18-ex2-F3	CGACGGCGTTCCACTCACTG	1069	60	With Betain 1M and DMSO 3%
	SOX18-ex2-R3	TGGGAACCTCAGGCACCCTCG			
Additional sequencing primers :	SOX18-ex2SEQ-R2	GGAAAGGCTCGGGCGGTGGC			
	SOX18-ex2SEQ-R3	CCGTAGTACAGGCCAGCGAGC			
GATA2					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1	GATA2_1F2	CCCGCAAAGTGATGTCGAAA	501	60	Taq DNA Polymerase, Qiagen
	GATA2_1R3	CCGAGAAATGGGAAGACAAG			
3	GATA2_3F	GCTGGCTTGGGCTTCTTA	386	60	Taq DNA Polymerase, Qiagen
	GATA2_3R	CCTCTCAACAAAGCACACCA			
4	GATA2_4F	ACACCTCGTGGTGGACTT	463	60	Taq DNA Polymerase, Qiagen
	GATA2_4R	TTTTCAGCAGCTCGAATCCT			
5-amplicon 1	GATA2_5F1	CTGGTTCTGGGAGTCGTCAT	434	64	Taq DNA Polymerase, Qiagen
	GATA2_5R1	GGTGCTAGGGTCAGGAGACA			
5-amplicon 2	GATA2_5F2	GGAGGCCCACTCTGTGTGA	570	64	Taq DNA Polymerase, Qiagen
	GATA2_5R2	ATCTGGGAAACCAACTGTC			
6	GATA2_6F	AACCGTGTGCTGAGAGG	321	64	Taq DNA Polymerase, Qiagen
	GATA2_6R	TAATTAACCGCCAGCTCCTG			
7	GATA2_7F	TCCATGGTTCTGAGATGCTTT	371	60	Taq DNA Polymerase, Qiagen
	GATA2_7R	AGCCAAGCTGGATATTGTGG			
8	GATA2_8F	CTATGAAGGTGGGCACAAT	608	60	Taq DNA Polymerase, Qiagen
	GATA2_8R	GGTGGGAACATTCACAGTAA			

CCBE1					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1	CCBE1_1F	GAGGAGCAGGACGCTTGGTC	239	65,5	-
	CCBE1_1R	CGCATCAAGCAGGAGCTCGC			
2	CCBE1_2F	TCTCCCCTGAGAATCGAAC	220	62,5	-
	CCBE1_2R_SEQ	TCCCAAGCGCTCTCCAAC			
3	CCBE1_3F	ATGCCTCAATGTTTCCTGGG	171	56	-
	CCBE1_3R	ATACACAGACAGATACACAG			
4	CCBE1_4F_SEQ	TCCGCCTCCTCCTGTAGTTG	267	62,5	-
	CCBE1_4R	GAGAAGTGAAGGGTCCAACC			
5	CCBE1_5F_SEQ	AAGCCCAATGTCATCTGTTG	422	59	-
	CCBE1_5R_SEQ	GGCACTTGAAACTTTAGAC			
6	CCBE1_6F	CGCTGTCAGCTACTCTGTCC	280	65,5	-
	CCBE1_6R	ATCCTTCCACCTGGCCTTGG			
7	CCBE1_7F	CACCAAGACAAATGCCGAGG	284	60,5	-
	CCBE1_7R	AGCTGGAGAACATTGTCCAG			
8	CCBE1_8F	CCTGGACTCTTGTAGCCA	344	60,5	-
	CCBE1_8R	GAACCATCTCTCTGTGTGC			
9	CCBE1_9F	TGGTCAGTATCTTATCAGAG	234	56	-
	CCBE1_9R	TGACAGACAAAGACCATCTC			
10	CCBE1_10F	TGTTTTGTGCAGGGAAGTGG	206	62,5	-
	CCBE1_10R_SEQ	CCTATAGGCTCATCAGAGCTGC			
11	CCBE1_11F	TAGCTTTGATTCTCCCATG	287	60,5	-
	CCBE1_11R	CTTTGGCGTGACGGTGTGG			

PTPN14					
Exon	Primer name	Primer sequence	Amplicon size (bp)	Tm (°C)	Comments *
1-amplicon a	PTPN14_ex1a_F	CCAGCGCTCCCTCCGCTC	210	62	-
	PTPN14_ex1a_R	CCGCTGCGCTCACTCCGCC			
1-amplicon b	PTPN14_ex1b_F	CCCTCAAAGTTCTTCCAAC	356	60	-
	PTPN14_ex1b_R	CCACGGAATTGATCCAGTG			
1-amplicon c	PTPN14_ex1c_F	TTCCCTTCGCCCTCTCC	205	62	-
	PTPN14_ex1c_R	GTCTGCCAAAGTCATCTGCA			
2-amplicon a	PTPN14_ex2a_F	CCATTGATAGGTCCCTCTG	158	60	-
	PTPN14_ex2a_R	GAGATGGCCTTAGCAGTTTC			
2-amplicon b	PTPN14_ex2b_F	GAGGAGCACAGGTGATAGTG	218	60	-
	PTPN14_ex2b_R	GACAGCGTGCCTCGATAAC			
2-amplicon c	PTPN14_ex2c_F	CGCCTGCTGGACAGCAATG	150	60	-
	PTPN14_ex2c_R	CATACCAACACGCATGCAC			
3-amplicon a	PTPN14_ex3a_F	CTGGAGTCTCGTTTCTGTG	189	60	-
	PTPN14_ex3a_R	AAAGCAAAGGCTCATTAGCG			
3-amplicon b	PTPN14_ex3b_F	GGTTTCTCAGCAAGAGCC	204	60	-
	PTPN14_ex3b_R	CTTACAGTTAGTCAACACC			
4	PTPN14_ex4_F	CTAGAGCATCTGTGTGTG	235	60	-
	PTPN14_ex4_R	GCAACACCATGATCAAACAG			
5	PTPN14_ex5_F	ATGTAGTGATGAGTTTGCC	205	58	-
	PTPN14_ex5_R	CTAATGTCCAAGAAGGTAG			
6	PTPN14_ex6_F	CAAATGCCACACCCTCATG	170	60	-
	PTPN14_ex6_R	GGCTGTAACATCTGTTGTG			
7	PTPN14_ex7_F	AGAGTGGGATCTTCACTGG	202	62	-
	PTPN14_ex7_R	GCCAGTACCGTCTGAGAAG			
8	PTPN14_ex8_F	TGTTGCAAGTGAACATGGGTC	197	60	-
	PTPN14_ex8_R	AACATTACAGTTCTCAAGG			
9	PTPN14_ex9_F	ATGCCTGGAACATTGTTGAG	174	60	-
	PTPN14_ex9_R	GTCTTGTGACACCTGACTG			
10	PTPN14_ex10_F	TGTGTGTCCTCCTCAGAAG	213	60	-
	PTPN14_ex10_R	CTGACAAAGCCATCAAGTCG			
11	PTPN14_ex11_F	CTCTCCTCCCTGTCTATC	180	60	-
	PTPN14_ex11_R	ATGCTCAACAGTCAGATCAC			
12	PTPN14_ex12_F	GTGAGTCACCAGCCGTGCT	172	60	-
	PTPN14_ex12_R	GTCTTAAGAAGGAGAACGG			
13	PTPN14_ex13a_F	TGTTGTGGCAGGATGGCTTG	1580	64,5	-
	PTPN14_ex13g_R	AGCATGTGCTTTCACACTGG			
14	PTPN14_ex14_F	GGAGTTACAGATTTGAGGAG	282	60	-
	PTPN14_ex14_R	GGGATCCTAAGACTACAGAG			
15-amplicon a	PTPN14_ex15a_F	GTTGTTTCATTGAGTTTTTGG	219	60	-
	PTPN14_ex15a_R	TTCTCCTCATAGGGACAAC			
15-amplicon b	PTPN14_ex15b_F	TTTCAGCACAGCAGCTCTG	179	60	-
	PTPN14_ex15b_R	CCAGCCATCTTACCAAAC			
16	PTPN14_ex16_F	GTAATGTTGTCGGACTTGG	215	60	-
	PTPN14_ex16_R	GAAAAAGGATGTGGAGTAGG			
17-amplicon a	PTPN14_ex17a_F	GATGAGACTTCCCTTGACC	166	62	-
	PTPN14_ex17a_R	GCAAAACAGAATCCGTTGGAAC			
17-amplicon a	PTPN14_ex17b_F	CCACCTATGGCAAGTTCAAG	206	60	-
	PTPN14_ex17b_R	TCAGGTAGCAGACTGGGAAG			
18	PTPN14_ex18_F	GAAGCCATGGAGGACTTTGG	241	62	-
	PTPN14_ex18_R	GTATCCGGAGAGAAGCCAG			
19	PTPN14_ex19_F	AAGGGAAGCCTCCTGTCTCAG	219	62	-
	PTPN14_ex19_R	ATGGAGCTGGTCCCTCCTC			

bp : base pairs

* The PCRs are performed with DNA Polymerase (Biotools), except when it is notified in the comments.