

Primer number	Primer sequence	Target Gene	Annealing temperature
o1680	AGGTACAGATGCTGTGCAG	h_PRM1	65°C
o1681	AGTCTGGTAACATTCTCAGGC	h_PRM1	62°C
o2216	TGAAAGCCTTGTACCCTGGC	m_Hmbs	66°C
o2217	GAGTGAACGACCAGGTCCAC	m_Hmbs	66°C
o4087	TCTTCTACTCCTCTGCCAAC	h_TMPO (LAP2)	61°C
o4088	CCACCAGAGGGAGTAGTTCC	h_TMPO (LAP2 $\alpha$ )	65°C
o4090	GTTAATGCCTGCAGAGGTCC	h_TMPO (LAP2 $\beta$ )	64°C
o4092	TCCAGGACCATTACGTGGAC	h_LEMD2	65°C
o4093	CTCGGTCCCAGACACGCTTC	h_LEMD2	69°C
o4094	TTGGTGAAGTCTGGGCAAG	h_BANF1	66°C
o4095	GAAGGCATCCGAAGCAGTCC	h_BANF1	67°C
o4096	TGGGTGGATGGCATCAGCC	h_BANF2	69°C
o4097	CCTCACACTCAGTGGCACC	h_BANF2	66°C
o4367	<u>AGGTTCGAATTCGCTAGCGAGATGGACGACATGTCTCC</u>	h_BANF2 +NheI	63°C
o4368	<u>ATTTGACGGATCCCAGGAAGCAGGCACACCAC</u>	h_BANF2 +BamHI	67°C
o4388	<u>AGGTTCGAATTCGCTAGCGATCAAGATGACAACCTCCC</u>	h_BANF1 +EcoRI-NheI	62°C
o4389	<u>ATTTGACGGATCCTCACAAGAAGGCGTCGCACC</u>	h_BANF1 +BamHI	69°C
o4399	<u>ATTTGACGGATCCCAAGAAGGCGTCGCACCAC</u>	h_BANF1 +BamHI	70°C
o4426	GCCCAATACTACCTTCACC	h_LEMD1	63°C
o4427	AAGCCTCAGGCCATTTTTGAG	h_LEMD1	64°C
o4434	GCCTCAAGTCTCTTCTTGCC	m_Lemd1	64°C
o4435	GATTGCATAGACTTCAGACAACC	m_Lemd1	61°C
o4491	GGCTTCAATGGAGTGTGGGA	h_LEMD3	63°C
o4493	CATAGCAGTGCCTTGCTTC	h_ANKLE1	64°C
o4495	ATGTCCTTGAGTCCCAGCAG	h_ANKLE2	65°C
o4496	ACTGAGATCTGGCAGCTGAG	h_ANKLE2	65°C
o4500	AACCATGATTGCAGACATTG	h_ANKLE2	59°C
o4501	CCCTCACGGAAATGGAATTG	h_ANKLE2	62°C
o4502	CATGAGCTGGGGTATCCCTG	h_ANKLE2	66°C
o4503	AGTTCGAGACCAGCCTGGTC	h_ANKLE2	67°C
o4504	GGAAAACCTCCACCTCGAGAG	h_ANKLE2	63°C
o4522	<u>AGGTCTCATATGAAGATGGACGACATGTGC</u>	m_Banf2	66°C
o4523	<u>TTTGACGAATTCCTTAGGAAACAGGAGCACC</u>	m_Banf2	64°C
o4527	CGGTAGACTGTGGGTCTGG	h_ANKLE2	68°C
o4528	AGAGCTGTGACACCTGCCTC	h_ANKLE2	68°C
o4542	<u>TTGGCAGGTACCGAAATGACAATGGATGCTCTGTTGG</u>	h_ANKLE2_Δ1-64 +KpnI	65°C
o4573	<u>TTGGCAGGTACCATGCTGTGGCCGCGGCTGG</u>	h_ANKLE2 +KpnI	65°C
o4579	<u>ATTGCAGGATCCGACAACACTACGCAGATCTTTCGG</u>	h_EMD +BamHI	67°C

o4580	<u>ATTGAACTCGAGTCATGGCTCCCTCTAGAAGG</u>	h_EMD +XhoI	64°C
o4609	AAAGTGCTCCTCCAAGCCAG	h_PTPRC	59°C
o4610	GCCAGAAATGCTATCAGTGCCTTAG	h_PTPRC	60°C
o4611	GCTTCGCGTCCAGACAGG	h_KIT	61°C
o4612	CGTGATTTGCCGGTGTGG	h_KIT	59°C
o4613	CTTTGACGCCGAGAGCTACA	h_CDH1	59°C
o4614	TTTGAATCGGGTGTGAGGG	h_CDH1	59°C
o4615	<u>ATGCTCCTCGAGCCATT</u> CAGTTGGATTTTCTAGGGTCAAC	h_TMPO (LAP2β) +XhoI	66°C
o4659	<u>ATGGTCCTCGAGTTA</u> ACCAAACAGCGACTTATTTTC	h_LEMD1 +XhoI	59°C
o4661	<u>AGGTCTGGTACC</u> ATGGTGGATGTGAAGTGTCTG	h_LEMD1 +KpnI	63°C
o4663	<u>CCTAGACTCGAGCT</u> ACAGGAAGCAGGCACACCAC	h_BANF2 +XhoI	71°C
o4667	CTGTGCGCTGCCAGCTCTG	h_LBR	70°C
o4668	GGATGATGTCCATGGTCGTC	h_LBR	63°C
o4669	ACCGAGCCCTCCTCGCAG	h_LBR	72°C
o4671	GGGAGGTGCTGTCGTGGCTC	h_LBR	72°C
o4702	<u>GGTTATAAGCTT</u> ACAACCTCCAAAAGCACC	h_BANF1 +HindIII	64°C
o4710	<u>AGGTCAGGATCC</u> CTACAGGGCGGCAAGCTCA	h_ANKLE2 +BamHI	68°C
o4711	<u>ATGGCTAAGCTT</u> GCCGGCCTGTCGGACCT	h_LEMD2 +HindIII	72°C
o4712	<u>TTGGCAGGTAC</u> CGGGGCTTATCGCTCTGAGTC	h_LEMD2 +KpnI	70°C
o4965	GCTACTGCTCGTCTTCTCGG	h_LEMD2	66°C
o4966	GTAGAGTTCATGCAGCAGCTC	h_LEMD2	64°C
o5022	<u>ATCCGGGATCCCC</u> GAGTTCCTGGAAGACC	h_TMPO (LAP2β) +BamHI	66°C
o5023	GACACCGTGTCTAAAGATTCCGG	h_LEMD3	63°C
o5024	GTGCCCACTACTTGTGATG	h_LEMD3	64°C
o5026	GCAAGCTGTGCCAATCGATCA	h_LEMD3	67°C
o5027	CAAGGTGCGTCAGATCTTGG	h_ANKLE1	64°C
o5028	AATCGACCGACCAGGCGGTG	h_ANKLE1	71°C
o5029	AGCGCAGCAGCTCCTCTACT	h_ANKLE1	69°C
o5095	CCGAGCTGACCACCTTGCTG	h_EMD	69°C
o5096	CTGGGTCTCGTACTCGAAGAT	h_EMD	64°C
o5097	GCTGTCCGCCAGTCAGTGAC	h_EMD	69°C
o5098	GGTAGTGCCTGATGCTCTGG	h_EMD	66°C
o5099	AGCATGCATCTCTATTCTGCC	h_TMPO (LAP2β)	65°C
o5100	GATTGGTCTGCGGCAACTAGCA	h_TMPO (LAP2β)	67°C
o5101	CGGACTTCTCCAGTGACGAAGAG	h_TMPO (LAP2)	67°C
o5103	CCACAATAGGACCAGGATCACTCC	h_TMPO (LAP2)	67°C
o5111	CCCCCGCCTCAGGTGAAATG	h_ANKLE2	69°C
o5112	GGGTCCACATTTCAATCCGGCTTTG	h_ANKLE2	69°C
o5186	<u>GGTTATAAGCTT</u> GACGACATGTCTCCAGGCTG	h_BANF2 +HindIII	70°C

o5322	<u>ATGGCTAAGCTT</u> ATGGCCGGCCTGTCGGACCT	h_LEMD2 +HindIII	78°C
o5323	<u>TTGGCAGGTACCT</u> CGCTCTGAGTCAGAGAAGG	h_LEMD2 +KpnI	66°C
o5350	<u>ATTGACCATATG</u> TTCTCTCCGAACCCATTGGAG	h_BANF2 +NdeI	69°C
o5351	<u>ATTGACCTCGAG</u> CAGGAAGCAGGCACACCAC	h_BANF2 +XhoI	69°C
o5352	<u>GTTCCAGGTACC</u> ATGCCAAGTAGGAAATTTGCCGATG	h_LBR +KpnI	68°C
o5353	<u>AAGTCCGGATCC</u> GTAGATGTATGGAAATATACGGTAGGGCAC	h_LBR +BamHI	68°C
o5354	<u>GTTCCAGGTACCC</u> CAAGTAGGAAATTTGCCGATGGTG	h_LBR +KpnI	68°C
o5355	<u>AAGTCCGGATCC</u> TTAGTAGATGTATGGAAATATACGGTAGGGCAC	h_LBR +BamHI	68°C

**Table S1.** Primer sequences used in RT-PCR, DNA constructs and sequencing. Adaptors used for constructs are underlined and the name of the restriction enzyme site in the adaptor is preceded by a + after the target gene name. Target gene prefix: h=human; m=mouse.