

9. APPENDIX

9.1 Sequence analysis of the hALC-1 promoter

Sequence 1	AACAGAATTA	GTTGGCCCAAG	CCTGCCCCAT	AAACTAGCTGA	ATGTCTTCAAG	CCAACCTCAA	CCTTCCTCG	GACCTTAGAT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----
↑↑ hALC-1 promoter in reporter gene construct								
Sequence 1	TCCCTGCCCG	TAACACACCA	TGGGGCCAGA	TCACTCTCAA	GGCTCCCTCT	GGCTCTCAAG	CCAATCATCT	GGGGCATGGA

Sequence 1	ACCTCTACTT	ACACACCCGG	CAAAATGCCA	CAGCTGGCGT	CCACCCGACG	CACAAATGCA	CCCTTACCGA	CTAACACGAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CCAGGATTCG	GTACTCTAAC	AAACTTGCGCT	TACAGGTGAG	GAAACCTGGGC	CTAGAAAGGC	GAAGTCATT	TTTTGGCCCT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CTCAGCTTTA	TTCCCTCTTT	CCTCTGAAC	GTAGAGTCTA	AAGATTCAAC	ACAAACCAAGT	TTTGTGTAGT	CCATACATAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CTCTTTTGT	TCTTATTTTT	CTGAATTATT	TTGTTGACTT	TCAAATTTT	TTTACATAA	ACAGTAATG	CTCGTTATAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AAATTTCAT	TAATACAGGA	ATGAAAAAAA	GTAAAAAAACT	GCAATTGCT	GTATCCATCC	CACCCCTAAC	CCCTAGGTCC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CCAGGAGCT	CTCTGTTAAC	AGTTCAGCGT	GTATCCATCC	TGACTCCFC	AATAAATGCA	GAACACTGTA	TGCTCTCTCC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CGACAACTGG	ATTATCATAT	ACATTATCCA	ACCATAGCGT	TTAGACTCG	ACATATCTAC	ATCTAACTCC	ACCTTATAGC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AAATTATTTC	AGTGCACCTG	GCCAACTGT	TCACTCCAGT	TTAGTCTCAA	TCTCCCCATG	TGTAAAATGA	AAAATAAAT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	ACATCTACG	TGGGCTGGCG	TGGGGCCCTA	TGGCTATAAT	CCCACCCCGT	TGGAACACGG	ACGCTACCGG	ACCCCTTCAG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CTCAGGGATT	CAAGACCAAC	CIGGGCAATT	TAGCAAGACC	TCATCTCTAC	TCAAAACCAA	AAAACAAAAA	AACTCCCCA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AAATTAGCCA	ATGTTGCTGG	TGTTGACCTG	TAGTCCCAAG	TACTCGGAAG	CTGAGGTGG	GAGAATCGCT	TGAGCCAGGA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AAAGACGAGGC	TCCAGTGAAC	TGTTGATTGCA	CCACTGCACT	CAACACCTGAG	CAACACAGCG	ATACCTTGT	TCTGTTAAAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CAAAACAAACA	AAACAAAATAG	TATCTACCTT	ATAGGATCAT	GTCGAAATT	TAATGAGATT	TTATATCAAT	AGCACITTAAC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AGTTCTCTGT	ACTGATAGTA	GTAAAGCACTA	CACACACACA	CACACACACA	CACACACACA	CACACAGACG	ACAGAAATGAG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	TACAGGTTAA	AGTCAAACACT	AAACCCCCAA	TTTTCTGACCC	CTCAGTCTCC	TGCACTTTCT	ACACACATTC	TCTGCTTCTC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	TCTTCTGGC	CTAGGCATGG	GTTCAGTGTG	CACTACTTGT	TGAATGAATG	ACTGAGGTG	TGTGTAAGGG	GTCAGATCTA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	GGCATCTGAG	GTCTGTGGAG	TTCCTGGGAT	GGCTGCTCG	GAAATGGAG	GTTTTCATCC	TGTGAGTGG	GAGGCTGGCG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	GGCAGTGTGG	GTGGGCTGCA	CCAGCTGTTG	CTTCAGAGCT	CCATGCCTGG	ACAGTGGGG	CTCTAGGGAG	AGCTGAGGGC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CCAGAGTGGC	TCTCAGCTTA	AAAGATCTTC	CCTTAAAGAAG	AAATGTCAGT	GGCCTGCCTC	TGCTCGGGAG	GGCTATAAAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AAAGCTTACCC	CTCCCCCTGGG	CTTTGTGCA	CCCTTATACAA	CTGCTCAAGT	CAGCTCATCT	CTCTGGCTCC	TCCCCCATAT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	TTCAGAACT	CTGTTTCCCT	GGTCCCTTCTG	GGTTTCCACCC	AATTCGGAAG	AAAGGATCAAG	CCTGTCCTAG	AGGTGAAGAC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AGAGCTGTGG	CATGAAGGGGG	AGGGGGCTGG	TGCCCCCAAA	CTCTGGTACA	ATACACAGTT	GTGAGCTGTA	CCCTGCTGGC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	GTTCCTCTCT	TTCATATGCTA	GCAGCAGCTTG	CTCTTGCCTT	CACCCAGGCC	CTCTGTGGGG	CTCTGTCCTCCA	GGATAAAAAGG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	GAAGGGAGGC	ACCCAGGCT	CCATCTCT	CTGGGAGAGC	CAAGCTCT	GGTTTCTC	TTAGATCACT	CTCTGCTCAA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AGATCCCAAC	AAACACAAAT	GGCTCCCAAG	AAAGCTGAGC	CTAAAGAAGG	GGCAGGCAAG	CCAGCTCCAG	CTCCAGCTCC
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	Translation start site	Exon 1	-----	-----	-----	-----	-----	-----
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----
Sequence 1	ACCCCTCTCA	CCAGCCCTTC	CCCCAGCTCC	TCAGGCTCCC	AAGGAACCTG	CCTTTCACCC	CAAGAGTGT	AAGGTAAGCT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AGGCTCAGCC	ATGGGGATAG	AGGTGGGGAT	GACATTGAGA	GTCTTTTGCG	TCTGGAGCTT	AGCGATCTAC	TTTATGTGGG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	CTGGACTGGG	ATCAGGGACTA	GGGTGTCCT	GGCCCAGATC	GCAGTCCCCT	GGGGCACTGG	AGTGGGTGTT	GGGGCTGATG
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	AGGGGGAGAT	TGAGTCATAA	ACCTTTCCG	TCAAGAATGA	GCTGCTGCTT	TGAGGGAGCC	CTGTCCTGCT	ACCCCTAGATT
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	TGTGCAGCTA	AGTTGGGAAT	GGGGGGAGCT	ACAACCAACC	ATCCATCCAC	CCTTTATAA	GCCATTAATG	AGGACCCACCA
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Sequence 1	TAGCAAAGTA	AA	-----	-----	-----	-----	-----	-----
Sequence 2	-----	-----	-----	-----	-----	-----	-----	-----

Figure 26. Comparison of the published sequence (sequence 1, hALC-1 promoter and exon 1) with the analyzed human ALC-1 promoter sequence within the reporter gene construct (sequence 2). The alignment verifies the correctness of the amplified sequence (Identity *).

9.2 Publications

Articles

Woischwill, C.; Karczewski, P.; Bartsch, H.; Luther, H. P.; Kott, M.; Haase, H.; Morano, I. (2005). Regulation of the human atrial myosin light chain 1 promoter by Ca^{2+} -calmodulin-dependent signaling pathways. *FASEB J.* Apr; 19 (6), 503-11

Gessner, C.; Woischwill, C.; Schumacher, A.; Liebers, U.; Kuhn, H.; Stiehl, P.; Jürchott, K.; Royer, H. D.; Witt, C.; Wolff, G. (2004). Nuclear YB-1 expression as a negative prognostic marker in nonsmall cell lung cancer. *Eur. Respir. J.* Jan; 23 (1), 14-9

Van Riet, I.; De Greef, C.; Aharchi, F.; Woischwill, C.; De Waele, M.; Bakkus, M.; Lacor, P.; Schots, R.; Van Camp, B. (1997). Establishment and characterization of a human stroma-dependent myeloma cell line (MM5.1) and its stroma-independent variant (MM5.2). *Leukemia* Feb; 11 (2), 284-93

Abstracts

Morano, I.; Woischwill, C.; Abdelaziz, A. I.; Karczewski, P.; Bartsch, H.; Kott, M.; Haase, H. Transcription regulation and function of the human atrial myosin light chain 1 in the heart. European Muscle Conference, 2004, Elba, Italy

Woischwill, C.; Bartsch, H.; Pierschalek P.; Karczewski P.; Morano, I. Transcriptional regulation of the human atrial myosin light chain 1 gene. European Muscle Conference, 2003, Montpellier, France

De Greef, C.; Woischwill, C.; Van Camp, B.; Van Riet, I. The MM5 cell lines: A model to study different gene expression in stroma-dependent and stroma-independent myeloma cells. 12th General Meeting of the Belgian Hematological Society, 24-27th January 1997, Genval, Belgium

De Greef, C.; Woischwill, C.; Van Camp, B.; Van Riet, I. The establishment and molecular characterization of a stroma-dependent MM cell line (MM5.1) and its stroma-independent variant (MM5.2) (1996). Clin. Exp. Metastasis; 14 (suppl.1), 13