

**Table S1. Primers used in the study**

**A. Primers and conditions**

Gene	Analysis	Primer name	Forward Primer (5'-3')	Reverse Primer (5'-3')	Ta (°C)
<i>MLH1</i>	MS-MCA	MLH1C_PCR_ext	TATTTTGTGTTTTATTGGTTGG	CCAATCAAATTTCTCAACTCTATA	50
		MLH1C_PCR_int	TGTTTTATTGGTTGGATATTT	CCAATCAAATTTCTCAACTCTATA	50
		MLH1D_PCR_ext	AGGTATTGAGGTGATTGGTTG	CAATTCTCAATCATCTCTTTAATAACA	50
		MLH1D_PCR_int	GGTGATTGGTTGAAGGTATTTT	ATCATCTCTTTAATAACATTAACCTAACC	50
	Pyrosequencing	Piro_PCR_MLH1_C	TTYGGTATTTTGTGTTTTATTGGTTGG	[Btn]AAACAACCTAAATACCAATCAAATTTCTCAAC	58
		Piro_Seq_MLH1_C	TAAAAAYGAATTAATAGGAA	-	-
		Piro_PCR_MLH1_intron1	ATTTAGYGGTTAGTTAATGTTATTAAGAGATG	[Btn]TAAACATACRCTATACATACCTCTACCC	56
		Piro_Seq_MLH1_intron1	AGTYGGGTTTATTTAAGGGTTA	-	-
	Clonal Bisulfite sequencing	PCR_MLH1_CD	TTTTAAAAAYGAATTAATAGGAAGAG	CAATTCTCAATCATCTCTTTAATAA	55
	Clonal Sequencing	PCR_MLH1_cDNA	GCATTCAAGCTGTCCAATCA	AGGTACAGGAATGGGTGTGTG	64
		Seq_MLH1_cDNA_int	GCAGTCCTTTGAGGATTTAGC	TCCATCAGCTGTTTTCGTT	-
	ASE (SNUPe)	rs179997_PCR_cDNA	CACAATGCAGGCATTAGTTTCTC	AGGTACAGGAATGGGTGTGTG	59
		rs179997_PCR_gDNA	GTTTCAGTCTCAGCCATGAG	ACACATGATTCACGCCACAG	55
		rs179997_snupe		TTCTCGACTAACAGCATTTCCAAAGA	50

**B. Localization of the probes and regions analyzed in the study of *MLH1* methylation. The *EMP2AIP1-MLH1* CpG island (colored in dark purple) encompass the *MLH1* promoter and intron 1**

