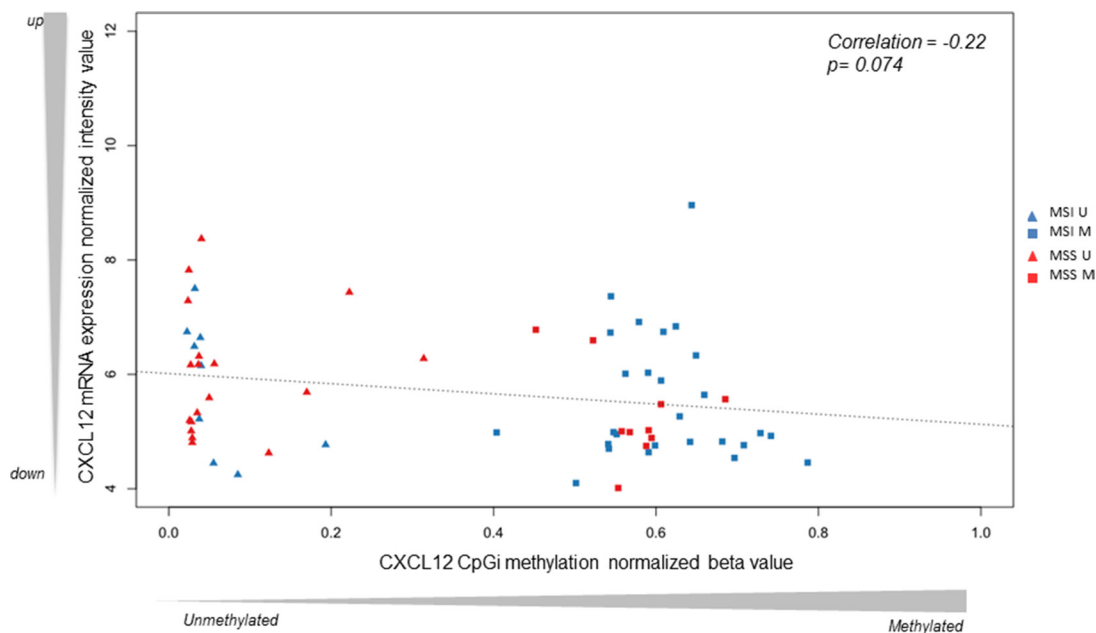
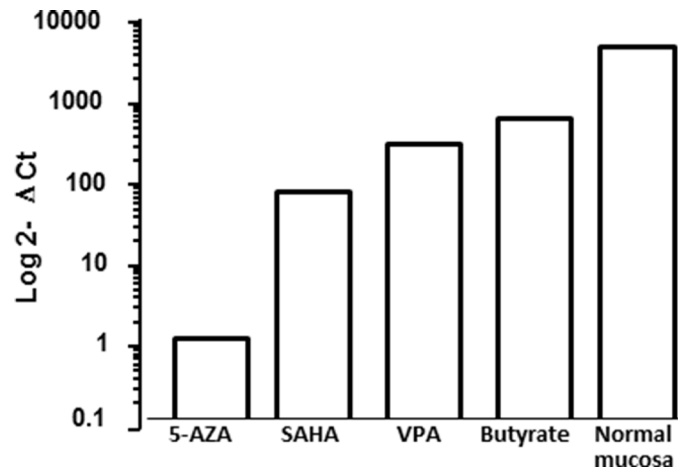


# Histone hypoacetylation contributes to CXCL12 downregulation in colon cancer: impact on tumor growth and cell migration

## Supplementary Materials



**Supplementary Figure 1: Correlation between CXCL12 promoter methylation and mRNA expression.** y-axis corresponds to Affymetrix log2 normalized intensity values of CXCL12 probe set 209687\_at and x-axis to  $\beta$ -values of the CpG site cg17267805.



**Supplementary Figure 2: Respective roles of methylation and acetylation in CXCL12 mRNA reexpression.** SW480 cells were treated with 5-AZA (2.5  $\mu$ M), SAHA (50  $\mu$ M), VPA (1 mM) and butyrate (10 mM) for 24 h. The mean Ct for CXCL12 was calculated for each treatment, normalized with PBGD as control and the results were expressed as 2- $\Delta$ Ct. Experiments have been repeated in triplicate. Results are representative of three sets of independent samples per group.

**Supplementary Table 1: CIMP profile and CXCL12 methylation in colon cancer cells**

	CACNA1G	IGF2	NEUROG1	RUNX3	SOCS1	CXCL12	CIMP
HCT116	M	M	M	U	M	M	CIMP-High
SW480	U	U	U	U	U	U	CIMP-Low
Caco2/TC7	U	U	M	U	M	M	CIMP-Low

M = methylated; U = Unmethylated.

**Supplementary Table 2: Characteristics of the 26 carcinomas of the validation cohort for PCAF and CXCL12 expression**

Carcinomas	<i>n</i> = 26	
<i>Mean age ± S.D</i>	67 ± 12	
<i>Men:Women</i>	15/11	26
<i>Localization</i>	Proximal colon	8
	Distal colon	18
<i>UICC classification</i>	In situ (Tis)	
	I	2
	II	10
	III	8
	IV	6
<i>MSS/MSI/CIMP</i>	26/0/0	26

**Supplementary Table 3: Primer sequences for MS-PCR**

PRIMERS	SEQUENCES	
CACN1G	CACN1G-UF	FAM- GTTTTGGTTTTTTTTGTTTTGTGT
	CACN1G-UR	CACCCTCTCAAAACAACCTCAC
	CACN1G-MF	FAM - TCGGTTTTTTTCGTTTCGCGT
	CACN1G-MR	CTCTCGAAACGACTTCGCCG
IGF2	IGF2-UF	VIC- TTGGAGTGGTTTTGGTGTGTG
	IGF2-UR	CAAACCACAAACACCCAACCTCAA
	IGF2-MF	VIC-GCGGTTTCGGTGTGCGTTATC
	IGF2-MR	CGCGAACGCCCAACTCGA
NEUROG1	NEUROG1-UF	FAM-TATTGTTGGTTAATTGGTGGTG
	NEUROG1-UR	ACATACCTCAACCACTAATCAC
	NEUROG1-MF	FAM-TCGGTTAATCGGCGGCGTC
	NEUROG1-MR	TACCTCGACCGCTAATCGC
RUNX3	RUNX3-UF	NED-GTTTATGGGAATATGTATAATAGTGG
	RUNX3-UR	CCCACTTCTCACAACAACAACA
	RUNX3-MF	NED-CGGGAATACGTATAATAGCG
	RUNX3-MR	GCTTCTCGCGACAACGACG
SOCS1	SOCS1-UF	PET-TATTTTTTTGGTGTGTGATAGTTG
	SOCS1-UR	AAACAACCAACCTAAAAATACACA
	SOCS1-MF	PET -ATTTTTTTGGTGC GCGATAGTC
	SOCS1-MR	GACCGACCTAAAATACACGC
CXCL12	CXCL12-UF	FAM-AAGGTTGGAGTGATTGTGTTTTG
	CXCL12-UR	AAAACCAAATACTAACCATAACCA
	CXCL12-MF	FAM-CGGAGCGTATTGCGTTTC
	CXCL12-MR	CCGAATACTAACCGTAACCG

**Supplementary Table 4: Primer sequences for chromatin immunoprecipitation**

Primer sequences (5'-3')	
CXCL12-F	CGCCTAAGGTCCTCAGTCTC
CXCL12-R	CTCCTCCGCTCCCTCTGT
CXCL12 Exon 2-F	GGAAGCCCGTCAGCCTG
CXCL12 Exon 2-R	ACAATCTGAAGGGCACAGTTTG