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# **Supplemental Information**

# IncRNA HotairM1 Depletion Promotes

#### **Self-Renewal of Cancer Stem Cells**

### through HOXA1-Nanog Regulation Loop

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#### Supplemental Information

### LncRNA HotairM1 Depletion Promotes Self-Renewal of Cancer Stem Cells through HOXA1-Nanog regulation loop

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GAPDH-F	AAGAAACCCTGGATTATTTAGC
GAPDH-R	TGGTATTCGAGAGAAGGGAGGG
HotairM1-F	GCCAGAAACCAGCCATAGTCCC
HotairM1-R	TTTGCTCCCTACCTTCCCTCGC
HOXA1-F	TCCTGGAATACCCCATACTTAGC
HOXA1-R	GCACGACTGGAAAGTTGTAATCC
siControl-F	UUCUCCGAACGUGUCACGU
siControl-R	ACGUGACACGUUCGGAGAA
siHOXA1-F	GCAGCUCAACGAGACCCAA
siHOXA1-R	UUGGGUCUCGUUGAGCUGC
Chip-HOXA1P1-F	AAATGCCACTAAAACGGTGATC
Chip-HOXA1P1-R	TCTTGCATTGTCCATCTGTCA
Chip-HOXA1P2-F	CTCGCCAGTTCATCTTTCATT
Chip-HOXA1P2-R	CCTCCTGCAAAAGTTTGCC
Chip-HOXA1P3-F	CGCTCTTCCCCCTCCATT
Chip-HOXA1P3-R	ACCGTTCAATGAAAGATGAACTG
Chip-HOXA1P4-F	CCCGGTGCAAAACTGAGT
Chip-HOXA1P4-R	AATGGAGGGGGAAGAGCG
Chip-HOXA1NC-F	CTGAAAGAGGCGTTTTGAGC
Chip-HOXA1NC-R	GGAGCTGGTCTCTTTCAACG
Chop-HotairM1-1	GAGCGCCGGGGGATTTAAAAA
Chop-HotairM1-3	TCGTCCTACGCTCATAAATC
Chop-HotairM1-5	GCGGGTTGATTTAAGAACCT
Chop-HotairM1-7	TAATAAGCTACCAGTCTCCA

Table S1: Primers used in this research.

Chop-HotairM1-9	CGGCATGTTCAAAGTCTTCA
Chop-HotairM1-2	AGAACGCAGCTTTTGCTCTT
Chop-HotairM1-4	CTTCCTCCGCTAAATCTCAG
Chop-HotairM1-6	AAATCCCTCCACATTTTCAG
Chop-HotairM1-8	GGACAGTCTAAGATTTGGGC

Figures



Figure S1: Expression of stem-related genes was much higher in cells enriched in serum-free medium than that in attached cells.



Figure S2: Several lncRNAs expression were detected in CSC and non-CSC subsets.



Figure S3: HotairM1 expression in different tumors according to the cosmic database.



Figure S4: HotairM1 expression in normal colon cell line and colorectal cancer cell lines, and in normal cell line RPE and ocular tumor cell lines.



Figure S5: Representative hematoxylin and eosin (HE) staining images of tumors in different groups are shown.



Figure S6: Representative HE staining images of HotairM1-overexpressing or oeVector tumors derived from cells injected subcutaneously into BALB/c nude mice.



Figure S7: The proliferation ability of HOXA1-silenced and control tumor cells was analyzed using CCK8 assay. OD450 nm value was recorded and the growth index was analyzed.



Figure S8: Nanog expression conversely could bind at the HOXA1 enhancer site and inhibit the acetylation of H3K27, thus further inhibiting HOXA1 expression.