

Supplementary Figure S1. The transfection efficiency of miR-196a-5p inhibitor or mimic in U2-OS or MG-63 cell line was determined by qPCR analysis. Data were the means \pm SEM of three experiments. ** $P < 0.01$.

Supplementary Tables

Table S1 The clinicopathologic data of OS patients

Variables	Number of cases (%)
	126 (100%)
<i>Age (years)</i>	
≥ 18	69 (57.02%)
< 18	57 (42.98%)
<i>Gender</i>	
Male	50 (39.68%)
Female	76 (60.32%)
<i>Tumor size(cm)</i>	
>5	104 (82.54%)
≤ 5	22 (17.46%)
<i>Distant metastases</i>	
No	101 (80.16%)
Yes	25 (19.84%)

Table S2. List of primers

Gene	Sense (F)	Anti-sense (R)
SNHG3	5' TTCAAGCGATTCTCGTGCC3'	5' AAGATTGTCAAACCCTCCCTGT3'
GAPDH	5'TTGCTTCAGGGTTTCATCCAG3'	5'GACACTCGCTCAGCTTCTTG3'
miR-196a-5p	5' TAGGTAGTTTCATGTTGTTG3'	5' ACCTGCGTAGGTAGTTTCATGT3'
U6	5'CCCTGGCACCCAGCAC3'	5'GCCGATCCACACGGAGTAC3'

Table S3 The association of SNHG3 expression with clinicopathological characteristics in OS patients

Variables	Cases (n)	SNHG3		<i>P</i> value
		High	Low	
	126	24	102	
<i>Age (years)</i>				
≥ 18	69	15	54	0.496
< 18	57	9	48	
<i>Gender</i>				
Male	50	10	40	0.821
Female	76	14	62	
<i>Tumor size(cm)</i>				
> 5	104	15	89	0.004
≤ 5	22	9	13	
<i>Distant metastases</i>				
No	101	18	83	0.570
Yes	25	6	19	

Table S4 Cox regression analysis of SNHG3 expression as survival predictor in OS patients

Variables	Univariate Cox regression analysis		Multivariate Cox regression analysis	
	RR (95% CI)	<i>P</i> value	RR (95% CI)	<i>P</i> value
<i>Age (years)</i>				
≥ 18 vs. < 18	1.460 (0.644 to 3.313)	0.365	NA	NA
<i>Gender</i>				
Male vs. Female	0.775 (0.333 to 1.802)	0.553	NA	NA
<i>Tumor size(cm)</i>				
> 5 vs. ≤ 5	4.176 (0.563 to 30.991)	0.162	NA	NA
<i>Distant metastases</i>				
Yes vs. No	1.746 (0.750 to 4.066)	0.196	1.798 (0.768 to 4.207)	0.176
<i>SNHG3 expression</i>				
High vs. Low	4.568 (2.079 to 10.035)	<0.0001	4.611 (2.099 to 10.130)	<0.0001

NA: not analyzed

Table S5 SNHG3 specific binding with miRNAs

name	mirAccession	geneName	targetsites	biocomplex
hsa-miR-196a-5p	MIMAT00002 26	SNHG3	1	9
hsa-miR-186-5p	MIMAT00004 56	SNHG3	1	4
hsa-miR-384	MIMAT00010 75	SNHG3	1	3

Table S6 The association of miR-196a-5p expression with clinicopathologic characteristics in OS patients

Variables	Cases (n)	miR-196a-5p		<i>P</i> value
		High	Low	
Total	123	33	90	
<i>Age (years)</i>				
≥ 18	67	14	53	0.152
< 18	56	19	37	
<i>Gender</i>				
Male	50	11	39	0.408
Female	73	22	51	
<i>Tumor size(cm)</i>				
≥ 5	102	30	72	0.186
< 5	21	3	18	
<i>Distant metastases</i>				
No	98	24	74	0.312
Yes	25	9	16	

Table S7 Cox regression analysis of miR-196a-5p expression as survival predictor

Variables	Univariate Cox regression analysis		Multivariate Cox regression analysis	
	RR (95% CI)	<i>P</i> value	RR (95% CI)	<i>P</i> value
<i>Age (years)</i>				
≥ 18 vs. < 18	1.369 (0.597 to 3.136)	0.458	NA	NA
<i>Gender</i>				
Male vs. Female	0.799 (0.340 to 1.875)	0.606	NA	NA
<i>Tumor size(cm)</i>				
≤5 vs. >5	3.787 (0.509 to 28.167)	0.193	NA	NA
<i>Distant metastases</i>				
No vs. Yes	1.797 (0.765 to 4.220)	0.179	1.768 (0.754 to 4.145)	0.190
<i>miR-196a-5p expression</i>				
High vs. Low	2.238 (0.990 to 5.056)	0.053	2.214 (0.981 to 4.995)	0.056

NA: not analyzed