

Table SI. Positive correlation between the expression levels of osteoblast markers in hFOB 1.19 cells.

Characteristic	Value	<i>AXIN2</i>	ALP activity	<i>RUNX2</i>	<i>OSX</i>
Cell number	r_s	0.781	0.907	0.568	0.871
	P-value	0.001	<0.001	0.027	<0.001
<i>AXIN2</i>	r_s	1.000	0.720	0.727	0.827
	P-value	-	0.002	0.002	<0.001
ALP activity	r_s		1.000	0.634	0.832
	P-value		-	0.011	<0.001
<i>RUNX2</i>	r_s			1.000	0.576
	P-value			-	0.025
<i>OSX</i>	r_s				1.000
	P-value				-

r_s , Spearman's correlation coefficient; *AXIN2*, axin 2; ALP, alkaline phosphatase; *OSX*, osterix.

Table SII. Positive correlation between the expression levels of osteoblast markers in the osteosarcoma cell lines MG-63 and Saos-2.

Characteristic	Value	MG-63				Saos-2			
		<i>AXIN2</i>	ALP activity	<i>RUNX2</i>	<i>OSX</i>	<i>AXIN2</i>	ALP activity	<i>RUNX2</i>	<i>OSX</i>
Cell number	r_s	0.624	0.931	0.944	0.689	0.915	0.551	0.884	0.981
	P-value	0.013	0.001	<0.001	0.005	<0.001	0.033	<0.001	<0.001
<i>AXIN2</i>	r_s	1.000	0.573	0.712	0.853	1.000	0.366	0.885	0.892
	P-value	-	0.025	0.003	<0.001	-	0.180	<0.001	<0.001
ALP activity	r_s		1.000	0.875	0.663		1.000	0.556	0.563
	P-value		-	<0.001	0.007		-	0.031	0.029
<i>RUNX2</i>	r_s			1.000	0.669			1.000	0.885
	P-value			-	0.006			-	<0.001
<i>OSX</i>	r_s				1.000				1.000
	P-value				-				-

r_s , Spearman's correlation coefficient; *AXIN2*, axin 2; ALP, alkaline phosphatase; *OSX*, osterix.

Table SIII. Correlation between the expression levels of osteoblast markers between hFOB 1.19, MG-63 and Saos-2 cell lines.

Cell lines	Cell markers					
		Cell number	ALP activity	<i>RUNX2</i>	<i>OSX</i>	<i>AXIN2</i>
hFOB 1.19/MG-63	r_s	0.969	0.893	0.633	0.863	0.619
	P-value	<0.001	<0.001	0.011	<0.001	0.014
hFOB 1.19/Saos-2	r_s	0.960	0.593	0.536	0.892	0.766
	P-value	<0.001	0.020	0.039	<0.001	0.001
MG-63/Saos-2	r_s	0.964	0.550	0.856	0.676	0.647
	P-value	<0.001	0.034	<0.001	0.006	0.009

r_s , Spearman's correlation coefficient; *AXIN2*, axin 2; ALP, alkaline phosphatase; *OSX*, osterix.

Table SIV. Correlation between the mean of *AXIN2* gene expression and differentially expressed extracellular Wnt antagonists in hFOB 1.19 cells.

Expression level	Proliferation	Differentiation
	<i>DKK1</i>	<i>DKK4</i>
<i>AXIN2</i>	r_s (P-value)	r_s (P-value)
	-0.784 (0.001)	0.543 (0.036)
r_s , Spearman's correlation coefficient; <i>AXIN2</i> , axin 2; <i>DKK</i> , Dickkopf.		

Table SV. Correlation between the mean of *AXIN2* gene expression and differentially expressed extracellular Wnt antagonists in MG-63 cells.

Expression level	Differentiation				
	<i>SFRP2</i>	<i>SFRP3</i>	<i>SFRP4</i>	<i>DKK2</i>	<i>DKK3</i>
<i>AXIN2</i>	r_s (P-value) 0.658(0.008)	r_s (P-value) 0.827 (<0.001)	r_s (P-value) 0.917 (<0.001)	r_s (P-value) 0.651 (0.009)	r_s (P-value) 0.651 (0.009)
r_s , Spearman's correlation coefficient; <i>DKK</i> , Dickkopf; <i>SFRP</i> , secreted Frizzled-related protein.					

Table SVI. Correlation between the mean of *AXIN2* gene expression and differentially expressed extracellular Wnt antagonists in Saos-2 cells.

Expression level	Proliferation	Differentiation				
	<i>DKK1</i>	<i>SFRP2</i>	<i>SFRP3</i>	<i>SFRP4</i>	<i>DKK2</i>	<i>WIF1</i>
<i>AXIN2</i>	r_s (P-value) -0.622 (0.013)	r_s (P-value) 0.975 (<0.001)	r_s (P-value) 0.831 (<0.001)	r_s (P-value) 0.763 (0.001)	r_s (P-value) 0.874 (<0.001)	r_s (P-value) 0.784 (0.001)

r_s , Spearman's correlation coefficient; *DKK*, Dickkopf; *SFRP*, secreted Frizzled-related protein; *WIF1*, Wnt inhibitory factor 1.