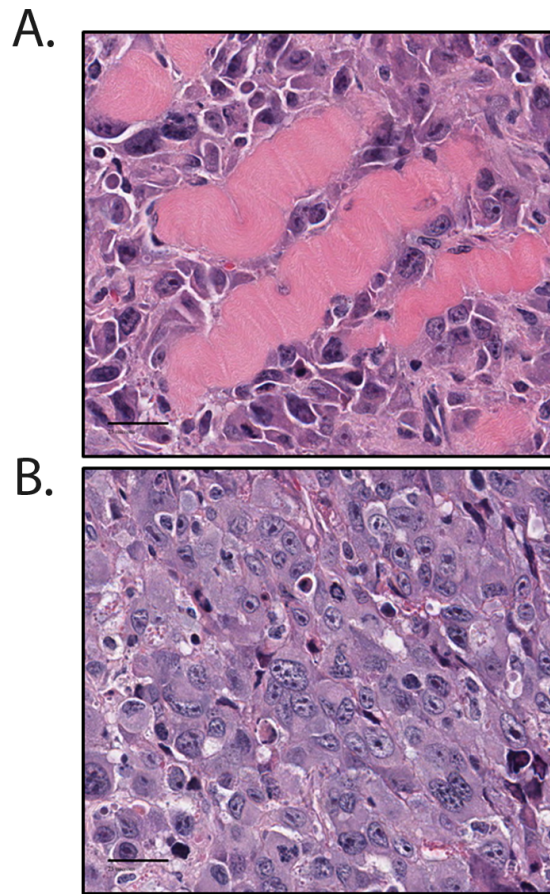
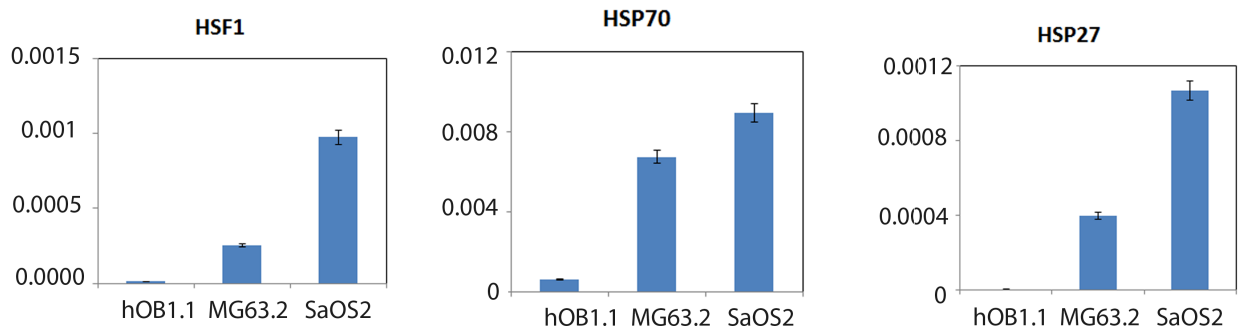


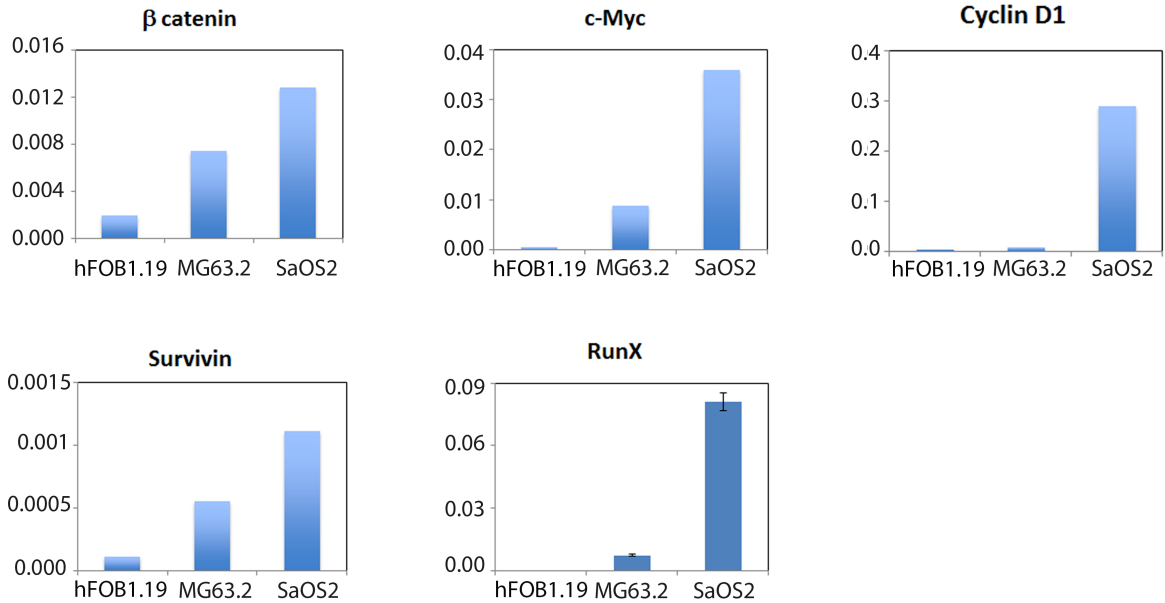
Supplementary Figure 1. Caspase 9 activation in the osteosarcoma cell lines and osteoblasts. Caspase-9 was induced in SaOS2 and MG63.2 cells in response to triptolide whereas human osteoblasts did not show any caspase activity.



Supplementary Figure 2. Histopathology of orthotopic OS tumors. H & E staining of OS tumor showing aggressive nature of the orthotopic osteosarcoma. **A)** Aggressive osteosarcoma tumors cells invading and surrounding the skeletal muscle tissue. **B)** Tumor cells with aberrant nuclei with multiple nucleoli (40X magnification, scale=25 μ M).



Supplementary Figure 3. Expression of heat shock proteins. HSP70, HSF1 and HSP27 mRNA expression in SaOS2, MG63.2 and osteoblast cells. These pro-survival proteins were overexpressed in cancer cells when compared to osteoblasts.



Supplementary Figure 4. Expression of pro-proliferation genes. Pro-proliferation and pro-survival genes like b-catenin, Survivin, c-MYC, RUNX2 and cyclin D1 were overexpressed in osteosarcoma cell lines compared to osteoblasts.

Supplementary Table 1: Genotypes of osteosarcoma cell lines used in this study.

	Cell Line	Major mutation	Host
1.	SaOS2	p53 -/Rb-	Human
2.	HOS	Rb+/p53-	Human
3.	U2OS	P53+/Rb+	Human
4.	K7M2	P53-/Rb-	Mouse (parental strain SaOS2)
5.	MG63.2	Rb+/p53-	Mouse (parental strain MG63)

Supplementary Table 2: Primers used in the study

Gene	Forward Primer	Reverse Primer
HSP70	ACCAAGCAGACGCAGATC	CGCCCTCGTACACCTGGA
HSP27	CCCGCATAGCCGCCTCTTC	GCCTCCACGGTCAGTGTGCC
b-catenin	TTGATATTGGTGCCAGGGAGA	TGCAAGTTCAGACAATACAGCTAA
c-Myc	CGTCCTCGGATTCTCTGCTC	GCTGCGTAGTTGTGCTGATG
Survivin	AGATGACGACCCCATGCAAA	CGCACTTTCTCCGCAGTTTC
CyclinD	CACACGGACTACAGGGGAGT	GATGGTTTCCACTTCGCAGC
RunX2	CGCCTCACAAACAACCACAG	TCACTGTGCTGAAGAGGCTG