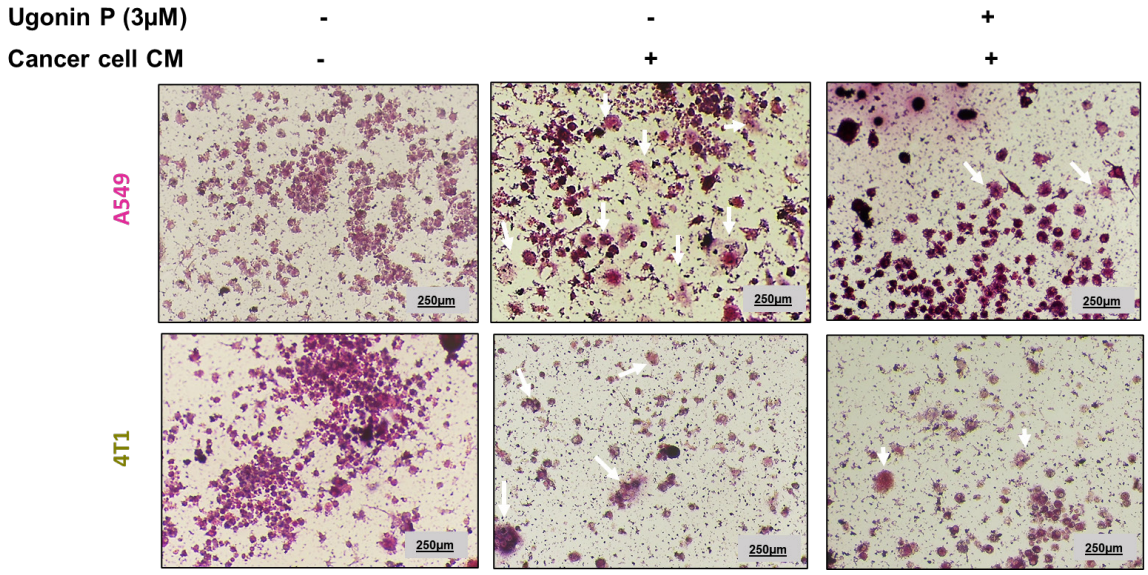
Supplementary Table 1. Primers were used in this study

Gene	Forward	Reverse
MDK	GCTACAATGCTCAGTGCCAGGA	CTTGGCGTCTAGTCCTTTCCCT
GAPDH	AATGGACAACTGGTCGTGGA	CCCTCCAGGGATCTGTTTG
hsa-miR-9-3p	TCTTTGGTTATCTAGCTGTATGA	TGGTGTCGTGGAGTCG
hsa-miR-491-5p	AGTGGGGAACCCTTCCATGAGG	TGGTGTCGTGGAGTCG
hsa-miR-223-3p	TGTCAGTTTGTCAAATACCCCA	TGGTGTCGTGGAGTCG
hsa-miR-1275	GTGGGGGAGAGGCTGTC	TGGTGTCGTGGAGTCG
U6snRNA	CTCGCTTCGGCAGCACA	AACGCTTCACGAATTTGCGT

Supplementary Table 2. miRNA inhibitor used in this study

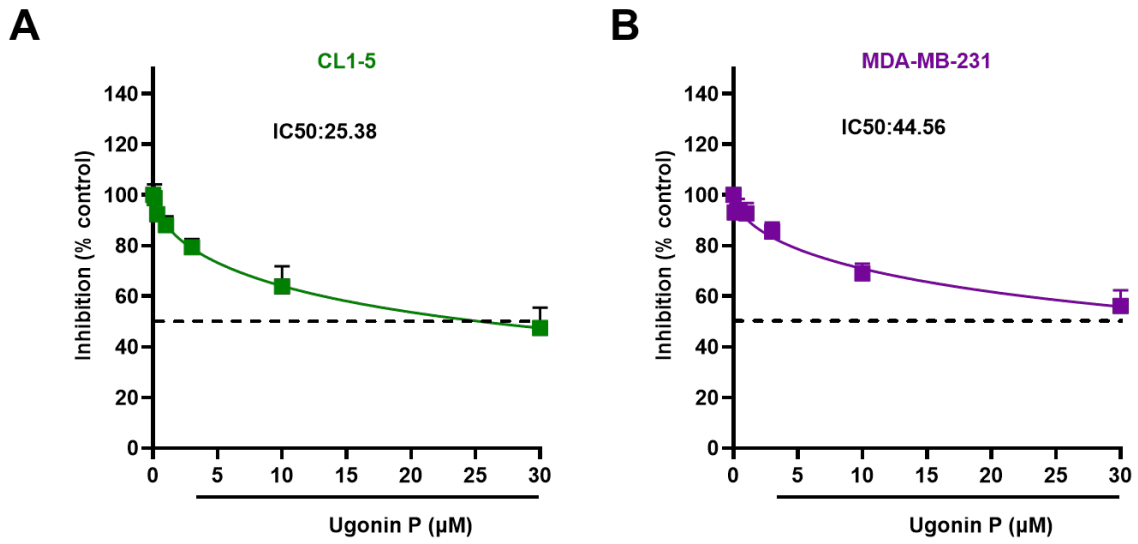
miRNA	Sequence
hsa-miR-223-3p inhibitor	UGGGGUAUUUGACAAACUGACA
hsa-miR-223-3p Negative Control	CAGUACUUUUGUGUAGUAGUACAA

Supplementary Figure 1



Supplementary Figure 1: Ugonin P inhibits cancer-promoted osteoclast formation. The CC-CM was subsequently collected and applied to RAW264.7 cells, which were then incubated for 5 days. Staining of TRAP in RAW 264.7 cells treated with CC-CM (white arrow indicates osteoclasts). ImageJ software quantified the number of positively stained cells or mature osteoclast area.

Supplementary Figure 2



Supplementary Figure 2: IC50 values for Ugonin P in CL1-5 and MDA-MB-231 cells. Cells were treated with increasing concentrations of Ugonin P (0.1-30μM) for 24 hours, and cell viability was measured using the MTT assay. IC50 values were calculated using non-linear regression analysis. Data are shown as mean ± SD from three independent experiments**.**