

Figure S1. Densitogram of RHOA protein expression compared to α -Actin protein on hMSCs stimulated by LIPUS for 24 h and 48 h and relative control cells.

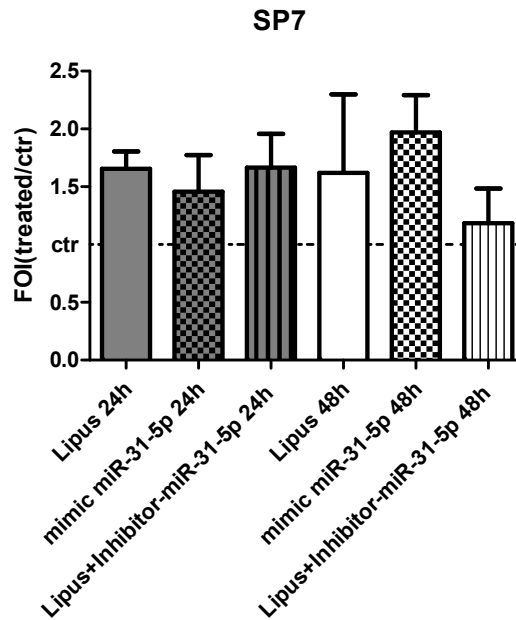


Figure S2. Analysis of osteoblast markers expression SP7, after LIPUS stimulation or miR-31-5p mimic or miR-31-5p inhibitor or negative scramble expression after at 24 or 48 h of treatments. Quantitative RT-PCR data are expressed as fold of change (FOI) in gene expression ($2^{-\Delta\Delta Ct}$) occurred in treated groups vs control group. Data reported were analysed by ANOVA Test and represented as Mean \pm SD. Tukey HSD post hoc comparison test: *, $p < 0.05$; **, $p < 0.005$; ***, $p < 0.0005$.

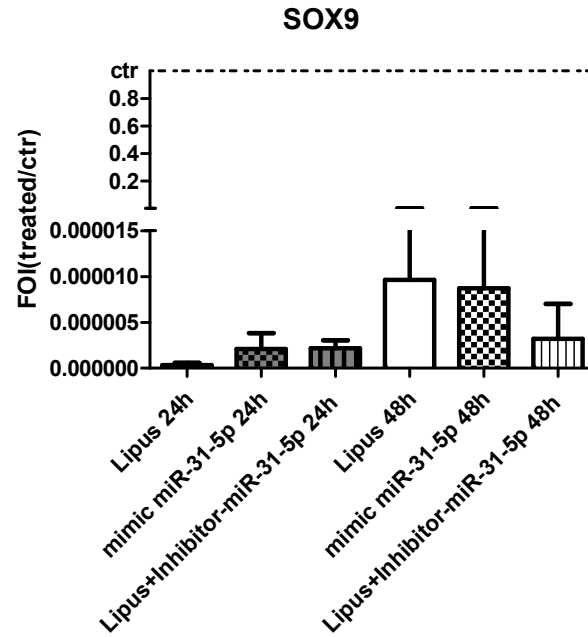


Figure S3. Analysis of SOX9 a chondroblast marker, by Quantitative RT-PCR on samples derived by LIPUS stimulation or miR-31-5p mimic or miR-31-5p inhibitor or negative scramble expression after at 24 or 48 h of treatments. Quantitative RT-PCR data are expressed as fold of change (FOI) in gene expression ($2^{-\Delta\Delta Ct}$) occurred in treated groups vs control group. Data reported were analysed by ANOVA Test and represented as Mean \pm SD. Tukey HSD post hoc comparison test: *, $p < 0.05$; **, $p < 0.005$; *** $p < 0.0005$.