

**SUPPLEMENTARY FIG. S4.** MG-63 cells exhibited significantly greater mRNA copy numbers for the osteogenic genes COL1A1 (A) and BGLAP (B) compared with HEK-293 cells (\*p<0.001). The elevated COL1A1 and BGLAP mRNA levels, as measured by real-time quantitative polymerase chain reaction, corroborated molecular beacon data showing that an overwhelmingly higher percentage of MG-63 cells positively expressed these osteogenic genes compared with HEK-293 cells.