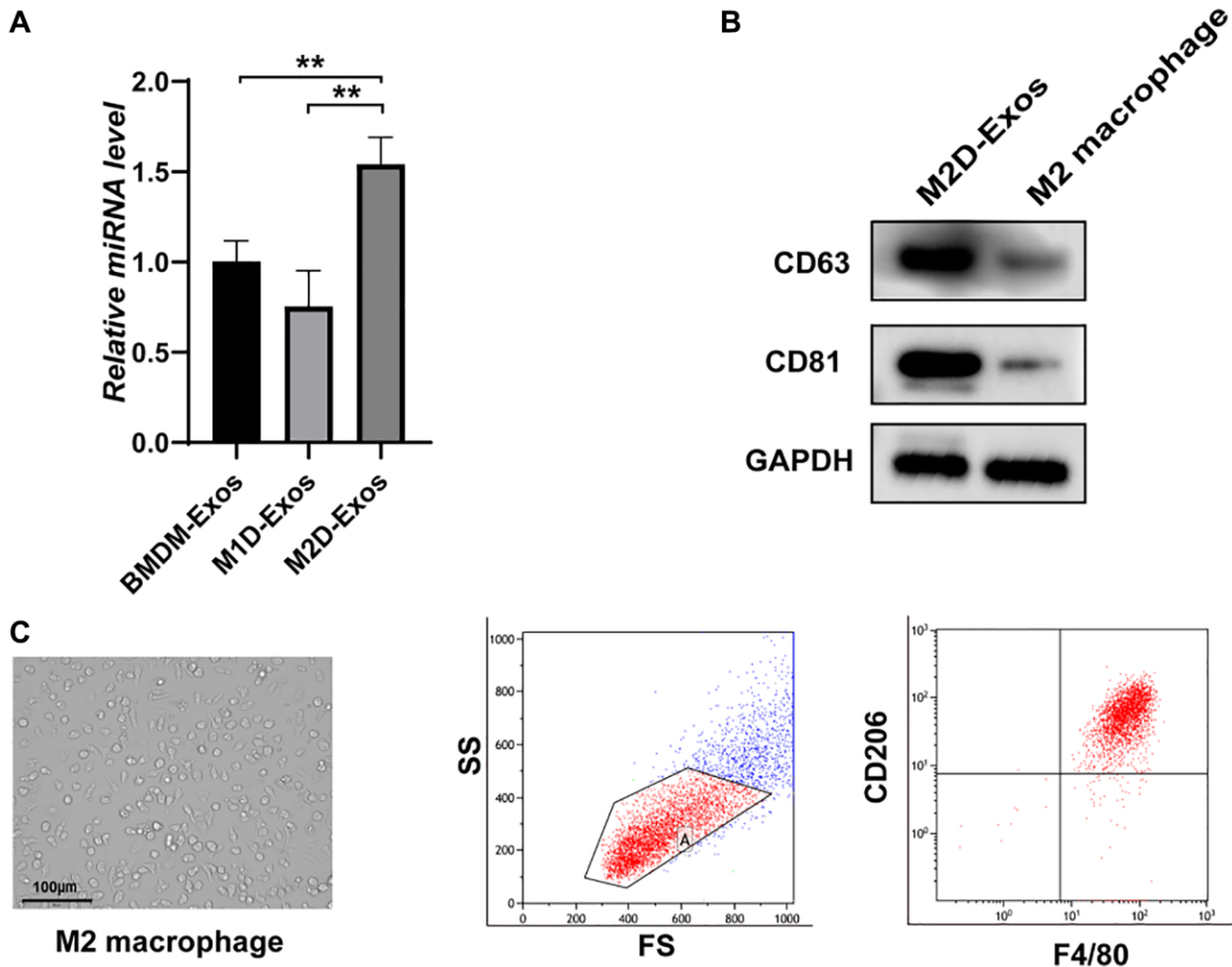
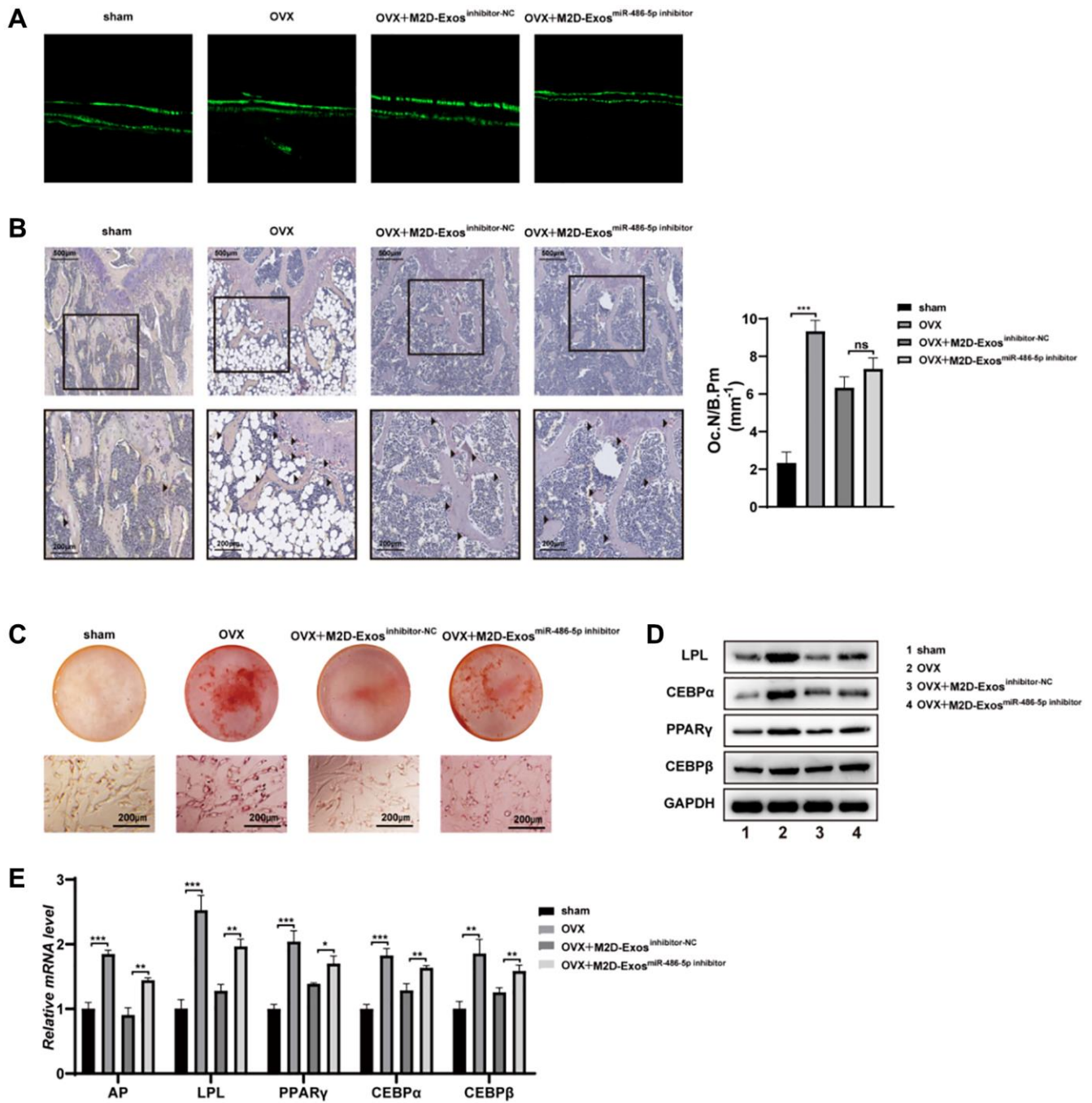


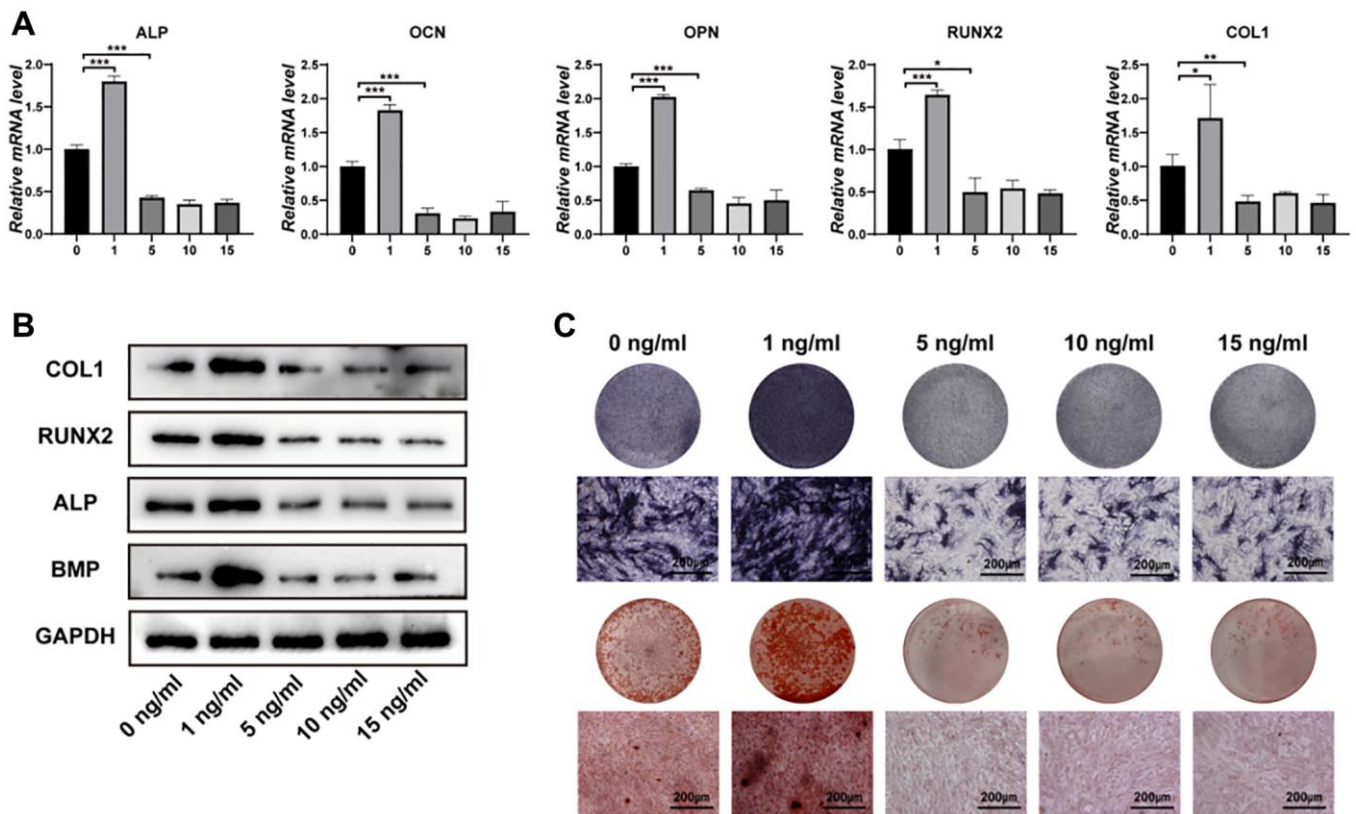
SUPPLEMENTARY FIGURES



Supplementary Figure 1. (A) The miR-486-5p levels in monocyte-derived exosomes, MID-Exos, and M2D-Exos were measured by qRT-PCR analysis. (B) The surface markers (CD63 and CD81) of exosomes were detected by western blotting. (C) M2 macrophages were identified by flow cytometry. Data are expressed as the mean \pm SEM, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.005$.



Supplementary Figure 2. (A) Representative images of new bone formation assessed by double calcein labelling in the femur sections. (B) Representative images show tartrate-resistant acid phosphatase (TRAP) staining and osteoclast number per bone perimeter (Oc.N/B.Pm) in the femur sections of different groups. (C) Oil red O staining was performed to detect lipid droplet formation in different groups in BMMSCs. (D, E) Western blotting and qRT-PCR were performed to analyse the protein and mRNA expression levels of adipogenic markers, respectively. Data are expressed as the mean \pm SEM, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.005$.



Supplementary Figure 3. The effect of TGF- β 1 on osteogenic differentiation in BMMSCs. (A, B) Osteoblast marker genes were detected by qRT-PCR and western blot after different concentrations of TGF- β I treatment. (C) ALP staining and ARS were performed after different concentrations of TGF- β I treatment. Data are expressed as the mean \pm SEM, * p < 0.05, ** p < 0.01, *** p < 0.005.