

ACTIVE MITOCHONDRIA SUPPORT OSTEOGENIC DIFFERENTIATION VIA β -CATENIN
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Supplementary Figure S1:

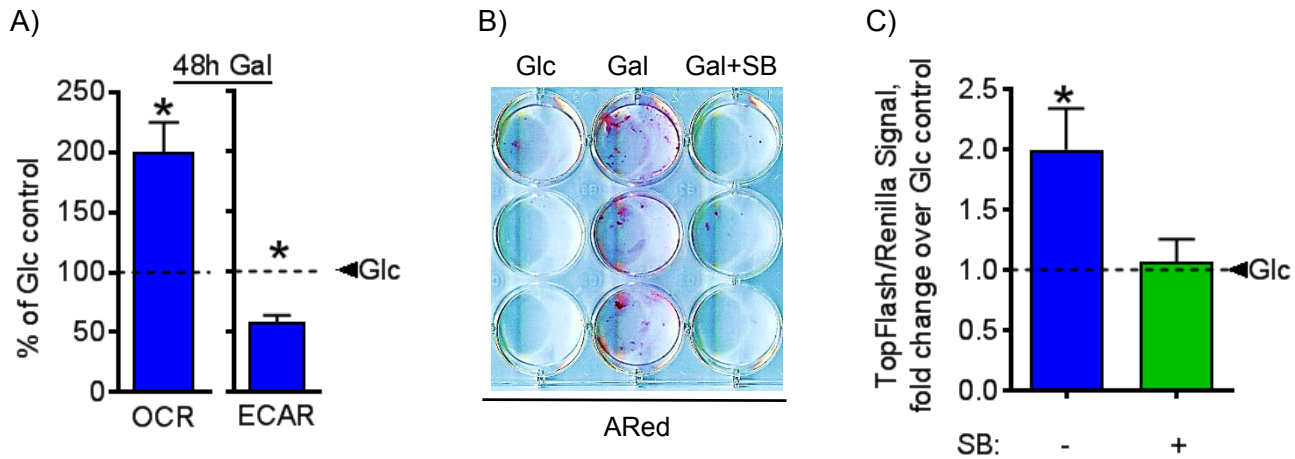


Figure S1. Inducing mitochondrial OxPhos by replacing media glucose with galactose stimulates β -catenin and osteogenesis in MC3T3 cells. MC3T3 E1 cells were incubated with galactose for 48 hours and then assessed. Treatment with galactose resulted in an increase in OCR accompanied by a decrease in ECAR, indicating a reliance on mitochondrial OxPhos in galactose media (A). Activation of OxPhos by replacing media glucose with galactose was sufficient to increase mineralization measured with Alizarin Red (ARed) staining (B) and β -catenin activity measured with TopFlash reporter (C). These effects were reversed by inhibition of ACLY with SB204990 (SB). Dashed line indicates glucose control. Data are means \pm SEM, n=3-6, * p < 0.05 compared to 48 hour glucose control. Glc: glucose (control), Gal: galactose.