

Description of Additional Supplementary Materials

Supplementary Movie 1: Contrast-enhanced ultrasound imaging of a lipid shelled microbubble contrast agent in the skeletal muscle microvasculature of a control $ER\alpha^{fl/fl}$ male mouse at baseline.

Supplementary Movie 2: Contrast-enhanced ultrasound imaging of a lipid shelled microbubble contrast agent in the skeletal muscle microvasculature of a control $ER\alpha^{fl/fl}$ male mouse, showing increases in capillary recruitment and blood flow in response to a hyperinsulinemic-euglycemic clamp.