Supplemental Figure Legends

Supplemental Figure I: Antibodies for both beta-tubulin (red; 680 nm) and GAPDH (green; 800 nm) were applied to a blot with 20 μ g of protein from EC, MEJ, and VSMC lysates, showing a lack of difference between lysates for each commonly used loading controls.

Supplemental Figure II: ImmunoTEM images of PAI-1 in response to high fat diet. Representative TEM images of mouse coronaries from mice fed a normal (left) or high fat diet (right) are labeled for PAI-1 using 10 nm gold beads. In both images, EC is endothelial cell, VSMC is vascular smooth muscle cells and (*) denotes IEL. Scale bar is 0.5 µm and representative for both images.

Supplemental Figure III: Effect of high glucose on PAI-1 expression on the vascular cell co-culture. The VCCC was treated with 30 mM of glucose for 18 hours and each cell lysate collected and western blot was run with each sample. *=p<0.05.

Supplementary Figure IV: Ribosomes on endoplasmic reticulum at the MEJ. An electron microscopy image of an MEJ from the mouse coronary arteries demonstrating the presence of ribosomes on endoplasmic reticulum (rER) coming down into the MEJ (arrow). Scale bar is 0.5 μm.

Supplemental Figure V: Microtubule binding assay for control conditions. Coomassie blot for microtubule binding assay controls is shown in (A). Conditions include BSA and microtubule associated protein fraction (MAPF) with no microtubules present (-MT), BSA and MAPF with microtubules present (+MT) and microtubules only (-). In B, a control microtubule binding assay using rNAMPT at 30 and 15 micrograms, with no microtubules is shown using immunoblot analysis NAMPT. In A and B, arrow heads indicate protein fraction of interest. For both images, S is supernatant and P is pellet.

SUPP FIG I



SUPP FIG II



SUPP FIG III





SUPP FIG IV





- MT

15 μ g **NAMPT**

30 μ g **NAMPT**