**Supplementary Methods and Procedures**

**Plasma analysis for cardiovascular related markers.** Plasma analysis of glucose, lipid profile and C-reactive protein (CRP) was performed using an automated filter photometer system and nephelometry-based high-sensitivity (hs-CRP) assay (Dimension RxL Max, Dade Behring IL, USA) to ensure a normal profile with no major signs of diabetes, dyslipidemia or systemic inflammation. Plasma adiponectin was quantified by Adiponectin (Multimeric) EIA (ALPCO Diagnostics, Salem NH, USA).

**Western blotting.** Cells were lysed in lysis buffer (50 mM Tris-HCl (pH 7.5), 20 mM sodium fluoride, 20 mM β-glycerophosphate, 5 mM EDTA, 10 mM EGTA, 1 mM sodium orthovanadate (Na₃VO₄), 1% (v/v) Triton, 1% (v/v) protease inhibitor cocktail (Sigma-Aldrich). Protein content was determined using Bio-Rad Protein Assay kit (Bio-Rad Laboratories, Hercules CA, USA). Proteins were denatured using Laemli buffer and boiling. Electrophoresis was performed on 12.5 or 15% SDS-polyacrylamide gels and transferred on nitrocellulose membrane (Bio-Rad Laboratories). Immunoblotting was performed in 5% skimmed milk in TBST using a rabbit polyclonal antibody against human AdipoR1 (Phoenix Pharmaceuticals, Burlingame CA, USA) or a rat monoclonal or rabbit polyclonal antibody against human adiponectin (R&D Systems, Abcam). Goat anti-rabbit IgG (Pierce, Rockford IL, USA) or goat anti-rat IgG (Bethyl Laboratories, Montgomery TX, USA) secondary antibody conjugated to horseradish peroxidase were used. Detection was performed using Western Lightning Plus-ECL reagents (Perkin-Elmer, Waltham MA, USA) and BioMax Light films (Kodak, Rochester NY, USA).