



D)



Figure S2









**Figure S1. Characterization of female PKG-CD transgenic mice. A):** Schematic depiction of the mouse PKG-CD transgene fragment used to generate PKG transgenic mice. **B):** Representative RT-PCR results showing the transgene over-expressed in different tissues from female transgenic mice. **C)**: Western blotting showing the expression of transgene (PKG-CD) (MW: 39 kDa) and endogenous PKG-I (MW: 78 kDa) in different tissues. Actin was used as an internal control. **D):** PKG activity in white fat (WAT) and brown fat tissue (BAT) was measured in the absence of cGMP as described in METHODS AND PROCEDURES. Results are the mean  $\pm$  SE (n=4). \* P<0.05 v.s. WT control

**Figure S2. Characterization of male PKG-CD transgenic mice. A**): Representative RT-PCR results showing the transgene over-expressed in different tissues from male transgenic mice. **B**): Western blotting showing the expression of transgene (PKG-CD) and endogenous PKG-I in different tissues. Actin was used as an internal control. **C**): PKG activity was measured as described in METHODS AND PROCEDURES. Results are the mean  $\pm$  SE (n=4). \* P<0.05 v.s. WT control