

## **Supplemental Figure 1**

Efficacy of renin-1d Cre / flox (for VhI and HIF-2α respectively) recombination resulting in HIF-2α stabilization only in glomerulus preparations of *Ren1* \*/Cre VhI fl/fl mice. Glomerulus preparations of each genotype were analyzed with respect to the genotype, recombination and HIF-2α protein. (A) PCR genotyping of the four genotypes with specific primers for the renin-1d Cre, floxed VhI, wildtype (wt) VhI, floxed HIF-2α and wt HIF-2α alleles resulting in 400 bp, 450 bp, 270 bp, 220 bp and 182 bp fragments, respectively. (B) The efficacy of the renin-Cre / flox recombination was assessed by the genotyping protocol, which produces an amplicon of the recombined VhI gene at 260 bp and the HIF-2α gene at 340 bp. We therefore assumed that the VhI and the HIF-2α gene respectively, dependent on the genotype, were substantially disrupted in the renin cell lineage. (C) Immunoblot for HIF-2α (and β-actin as a control) shows HIF-2α stabilization (at 118 kDa) only in glomerulus preparations of *Ren1* \*/Cre VhI fl/fl mice. Glomerulus preparations of *Ren1* \*/Cre VhI fl/fl mice with recombined VhI and HIF-2α genes lack HIF-2α stabilization.