Effects of L-Mimosine on PHD activity in the rat kidneys. Conversion rate of $[^{14}\text{C}]-2$-oxoglutarate into succinate by renal tissue homogenate was used to represent PHD activity. *P < 0.05 compared with control. # P<0.05 compared with cortex. L-Mim: L-mimosine. (n=5). L-Mim is a PHD inhibitor, which binds to the active site of PHDs to interfere with the reconstitution of the active enzyme. It has been reported that this inhibitor of PHD activity up-regulates the HIF-1α levels. This figure shows the HIF-1α peptide-dependent conversion rate of $[^{14}\text{C}]-2$-oxoglutarate into succinate, which represents the PHD activity, by renal tissue homogenate from vehicle- or L-Mim-treated rats. Consistent with PHDs expression levels, PHD activities were higher in the renal medulla than in the renal cortex. Pretreatment of animals with L-Mim for 2 weeks significantly reduced PHD activity in the rat kidneys. This inhibitory effect was greater in the renal medulla than in the renal cortex.