LEGENDS TO FIGURES TO BE PLACED IN ONLINE SUPPLEMENT

 $\underline{S1}$ in vitro: (A) Original recording of a spontaneously contracting renal pelvis showing a concentration dependent increase in force development in response to ET-1. (B) Effects of cumulatively increasing ET-1 concentrations (1-300 nM) on the frequency of renal pelvic contractions in the absence (closed symbols) and presence (open symbols) of the ETA-R antagonist BQ123, 10 μ M. * P<0.01, pelvic wall tissue treated with BQ123 vs vehicle, n=5 per group. CNT, control value.

 $\underline{S2}$ Immunofluorescence labeling of $T_{10}DRG$ and renal tissue shows ETB-R on satellite cells (arrows) surrounding neural cell bodies(a) and on nerve fiber-like structures (arrows) in the pelvic wall (e) and ETA-R on smooth muscle cells in vessels (arrows) in DRG (c) and in the pelvic wall (g). The ETB-R and ETA-R labeling is blocked by adsorption with the peptide (b,d,f,h).