SUPPLEMENTARY DATA

Mean foot process width (FPW) assessment by electron microscopy
To measure mean foot process width (FPW) digital electron micrographs were acquired using a SIS Megawiew II camera (7900X magnification) and the system was calibrated using the scale bar on the electron micrographs. Six random capillary loops in each of five randomly selected glomeruli per specimen were selected and the total circumference of the capillary loop was included in the image in 50% of cases. Foot processes were defined as any connected epithelial segment butting on the glomerular basement membrane and separated from the cytoplasmic extensions of the adjacent foot processes by lateral membrane. Only foot processes with lateral membranes clearly identifiable over the entire length were included. FPW was determined by manually counting the number of foot processes overlying the peripheral capillary basement membrane (BM) and measuring BM length by an image analysis software. The FPW was calculated as: $FPW = (\pi/4) * \sum BML / \sum fp$, where $\sum fp$ is the number of foot processes counted on the total 30 electron micrographs from each animal, $\sum BML$ is the total peripheral capillary BM length for that animal and $\pi/4$ is a factor used to correct for presumed random variation in the angle of the section relative to the long axis of the foot process. Values of filtration slit width were not subtracted; therefore, the reported values of FPW represent, on average, the width of one foot process and the adjacent filtration slit.