



**Figure 5 – figure supplement 1: Myocyte PKD2 knockout attenuates phenylephrine-induced vasoconstriction, but does not alter pressure or angiotensin II-induced vasoconstriction in hindlimb arteries. A:** Mean myogenic tone at 80 mmHg illustrating that myogenic tone is similar in third-, fourth- and fifth-order mesenteric arteries and unaltered by PKD2 knockout (*Pkd2<sup>fl/fl</sup>*: 3<sup>rd</sup> n=4; 4<sup>th</sup> n=5; 5<sup>th</sup> n=4 and *Pkd2 smKO*: 3<sup>rd</sup> n=7; 4<sup>th</sup> n=4; 5<sup>th</sup> n=4). **B:** Mean data for 60 mM K<sup>+</sup>-induced constriction in first-and second order mesenteric artery rings (*Pkd2<sup>fl/fl</sup>* n=5; *Pkd2 smKO* n=6). **C:** Mean data for phenylephrine-induced vasoconstriction in pressurized, endothelium-denuded 4<sup>th</sup> order mesenteric arteries (*Pkd2<sup>fl/fl</sup>*, n=3 and *Pkd2 smKO*, n=3). \* indicates p<0.05 versus *Pkd2<sup>fl/fl</sup>*. **D:** Mean myogenic tone at 80 mmHg in endothelium-denuded 4<sup>th</sup> order mesenteric arteries (*Pkd2<sup>fl/fl</sup>*, n=3 and *Pkd2 smKO*, n=3). **E:** Mean data for angiotensin II-induced vasoconstriction in mesenteric arteries (*Pkd2<sup>fl/fl</sup>*, n=11-12 and *Pkd2 smKO*, n=10-11).