



**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).