



**Figure 3 | Glycine evokes pericyte-mediated dilation of vasa recta capillaries.** Data was taken from time series experiments in which naïve kidney slices were exposed to glycine (gly; 1 mM) **a**, Representative trace of glycine evoked vasodilation. Vasa recta exposed to PSS (**bi**), glycine (**ii**), PSS (**iii**) glycine (**iv**). Yellow circle = pericyte, red lines = pericyte site and blue lines = non-pericyte sites. **c**, mean repeatable pericyte-mediated dilation of vasa recta evoked by glycine. **d**, Concentration-dependent effect of glycine on vasa recta diameter. **e**, Representative trace showing that exposure of tissue to glycine in the presence of MK-801 (300 nM) resulted in pericyte-mediated constriction of vasa recta that was reversed when MK-801 was removed. **f**, mean data showing MK-801 inhibits glycine-evoked dilation of vasa recta resulting in constriction, when MK-801 is removed from the superfusate, glycine evoked dilation of vasa recta at pericytes. **g**, **h**, Strychnine (1 μM) failed to attenuate the dilatory response of vasa recta to glycine. Data shown from male Sprague-Dawley rats as mean ± s.e.m. Statistics were calculated in GraphPad PRISM (5.0). Statistical significance between pericyte and non-pericyte sites were determined using: a Student's t-test for pericyte versus non-pericyte sites, \*\*\*P < 0.001; \*\*P < 0.01, and A one-way ANOVA and post hoc Dunnett test for comparison of agonists against against gly 1 mM, \*P < 0.05, ## P < 0.01, ### P < 0.001