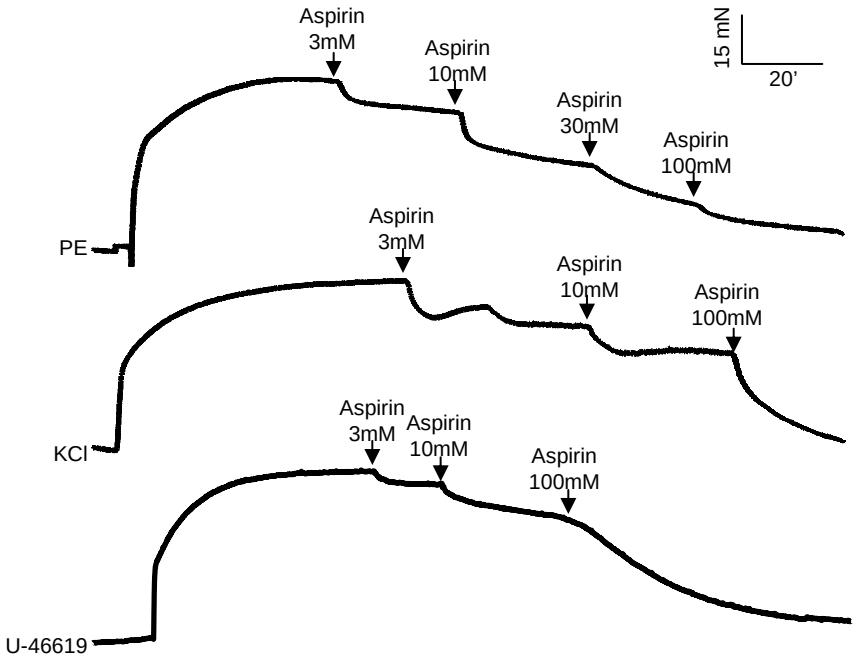
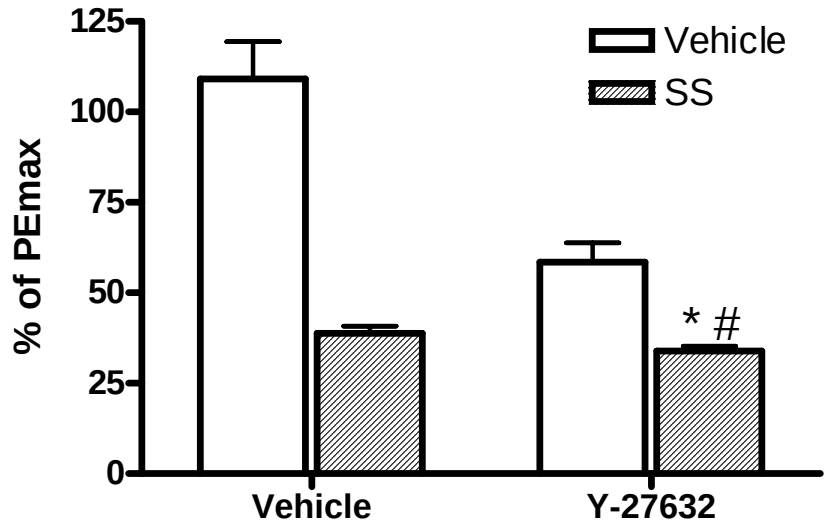
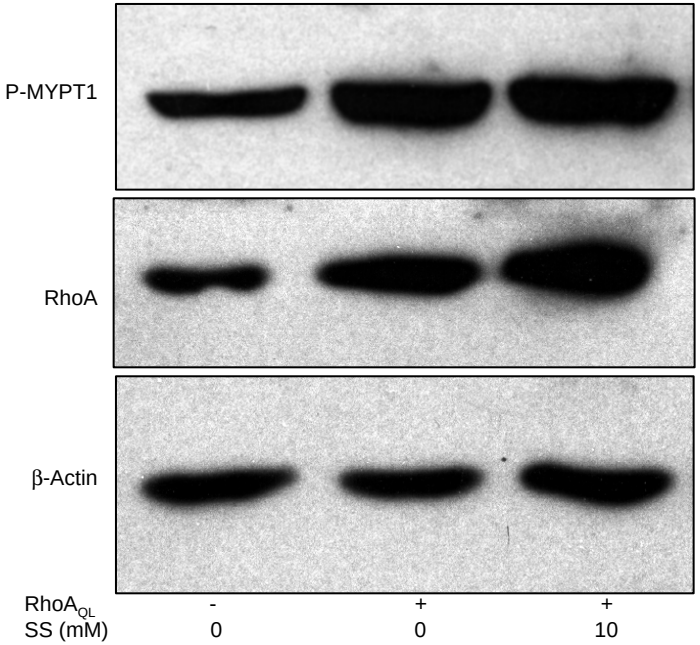


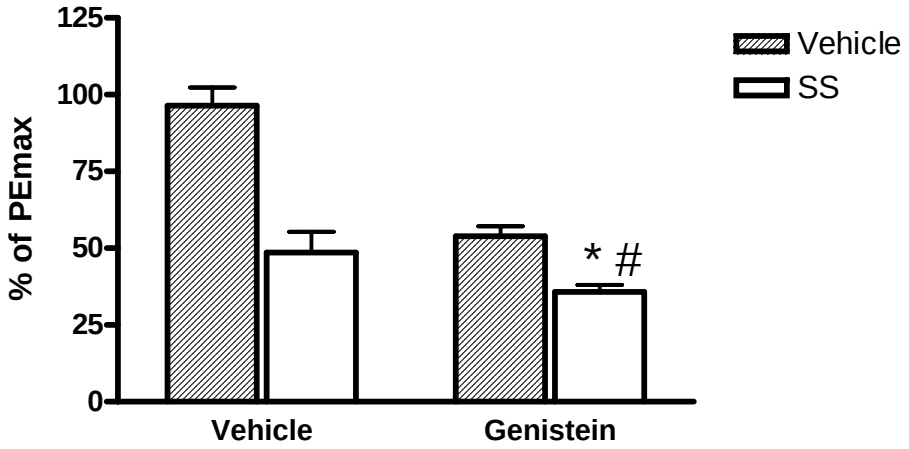
Supplementary figure 1 Aspirin dose-dependently relax pre-contracted rat aortic rings. Endothelium denuded rat thoracic aortic rings were contracted by phynelepherine (PE, 1μM), KCl (80 mM), and U-46619 (0.1 μM), and then treated with indicated concentration of Aspirin. A representative result from at least three independent experiments is presented.



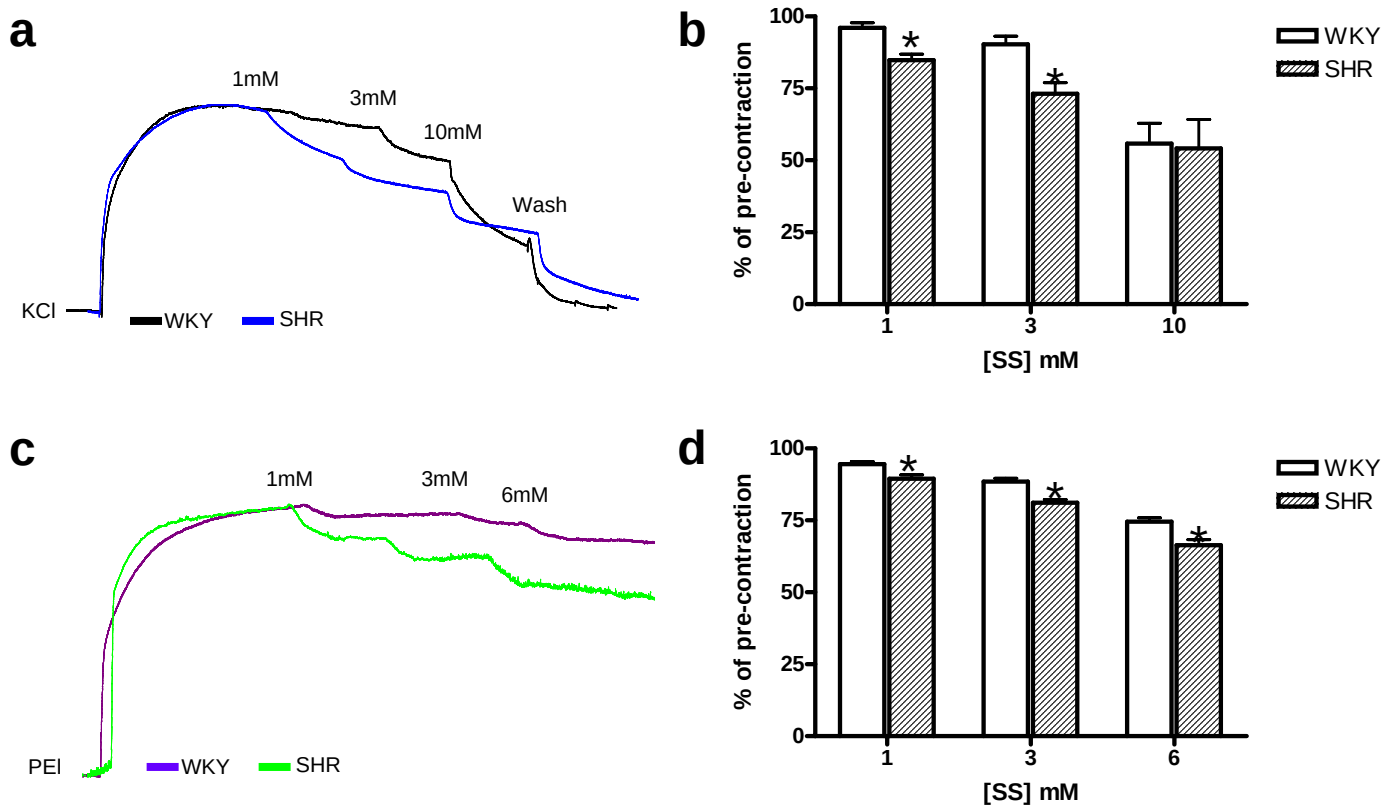
Supplementary figure 2 Rho-kinase inhibitor decreased the vasodilator action of sodium salicylate. Endothelium denuded rat thoracic aortic rings were pre-treated with vehicle, 10 mM sodium salicylate, 1 μM Y-27632, or 1 μM Y-27632 plus 10 mM sodium salicylate for 10 minutes, then contracted by 100 nM angiotensin II. n = 4-7. *, $P < 0.01$ vs. Genistein only. #, $p < 0.02$ vs. SS only. Student's t-test.



Supplementary figure 3 sodium salicylate did not affect phosphorylation of MYPT1 induced by over-expression of constitutively active RhoA.
Cultured rat vascular smooth muscle cells were infected with constitutively active RhoA (RhoA$_{QL}$) expression adenoviral vector for 24 hours, then treated with vehicle or 10 mM sodium salicylate for 30 minutes. Cell lysates were prepared with RIPA buffer, and subject to western blotting analysis.



Supplementary figure 4 Tyrosine phosphorylation inhibitor decreased vasodilaor action of sodium salicylate (SS). The vasodilator action of sodium salicylate on contraction by 100nM angiotensin II were examined in the presence of Genistein or vehicle. Results were expressed as percent of control contraction. n=6. *, $P < 0.01$, compared with Genistein only. #, $p < 0.01$, compared with SS only. Student's t-test.



Supplementary figure 5 Vasculature from SHR was more sensitive to sodium salicylate. Aortic rings from SHR and WKY were contracted by either 120 mM KCl (a and b) or 1 μM PE (c and d), and relaxed by indicated concentration of sodium salicylate (SS). A representative recording and the summary (mean ± s.e.m.) of six independent experiments was presented. *, $p < 0.05$. Student's t-test combined with Bonferroni post-hoc test.