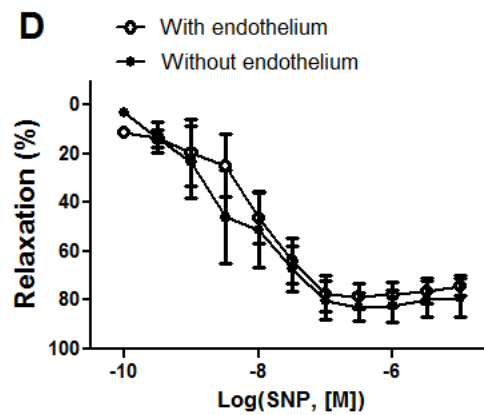
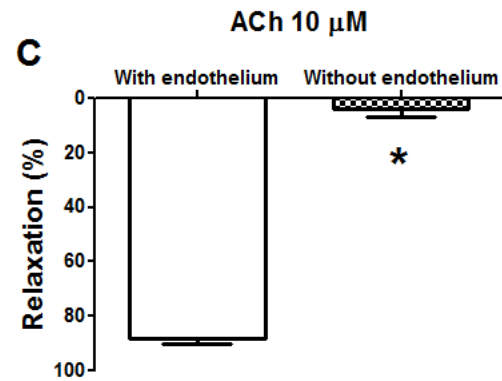
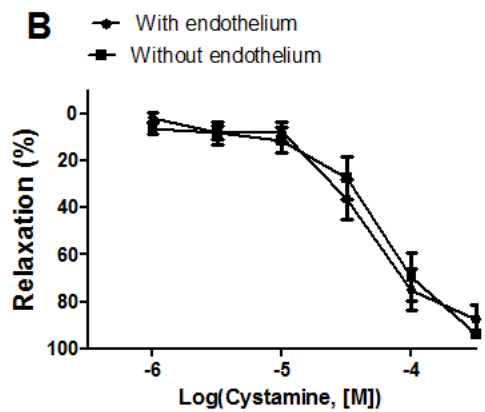
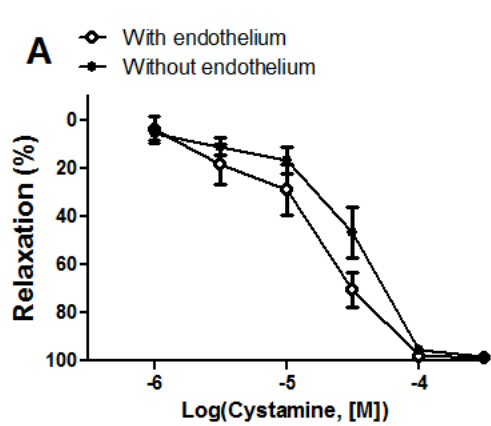
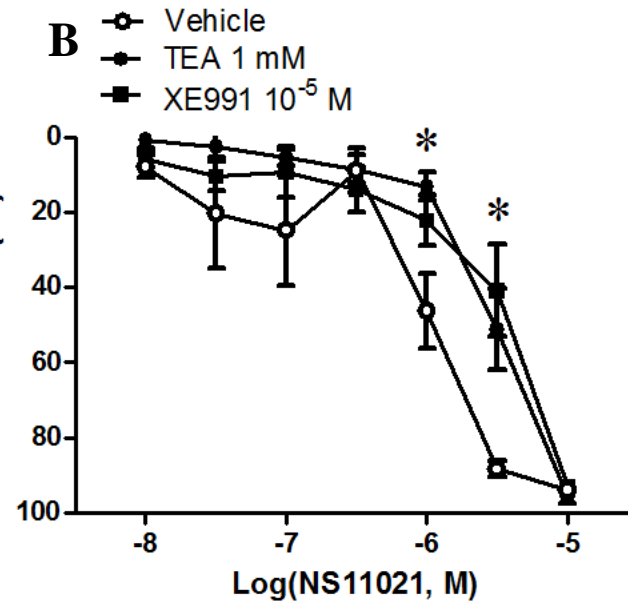
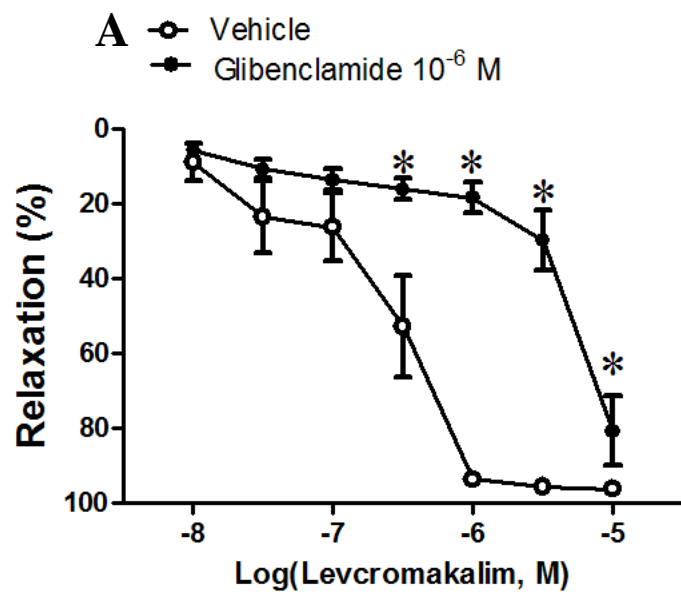


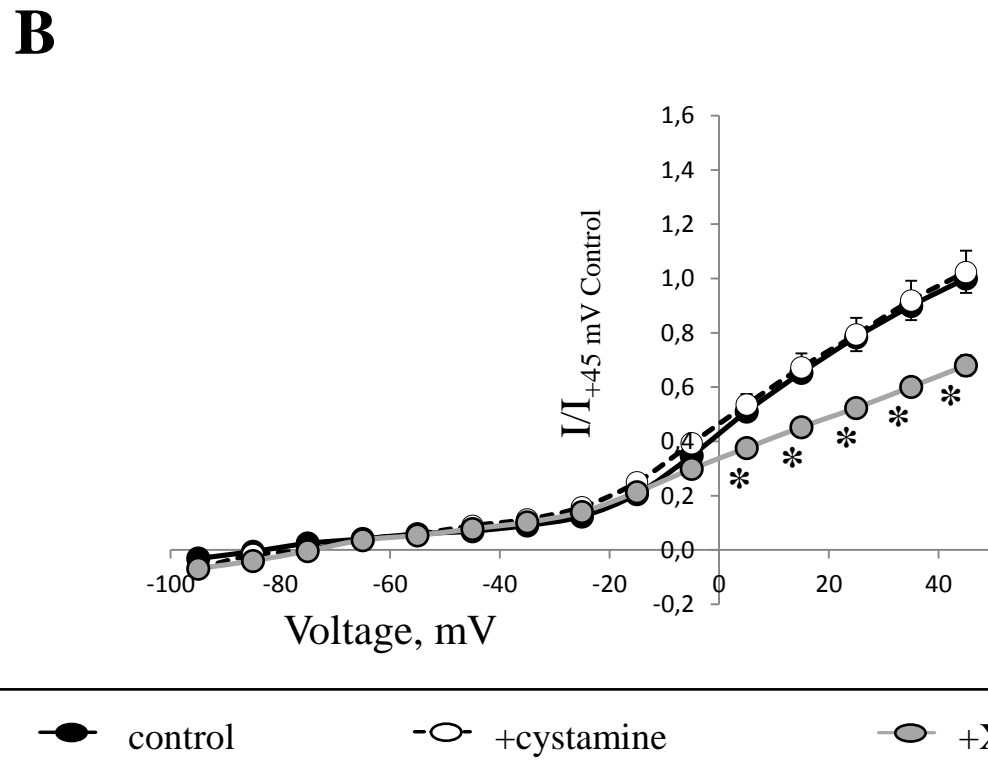
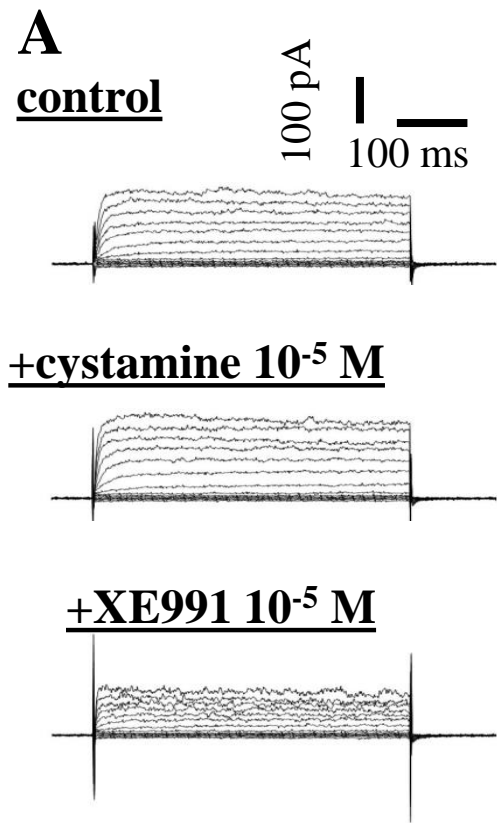
Supplementary figures and tables



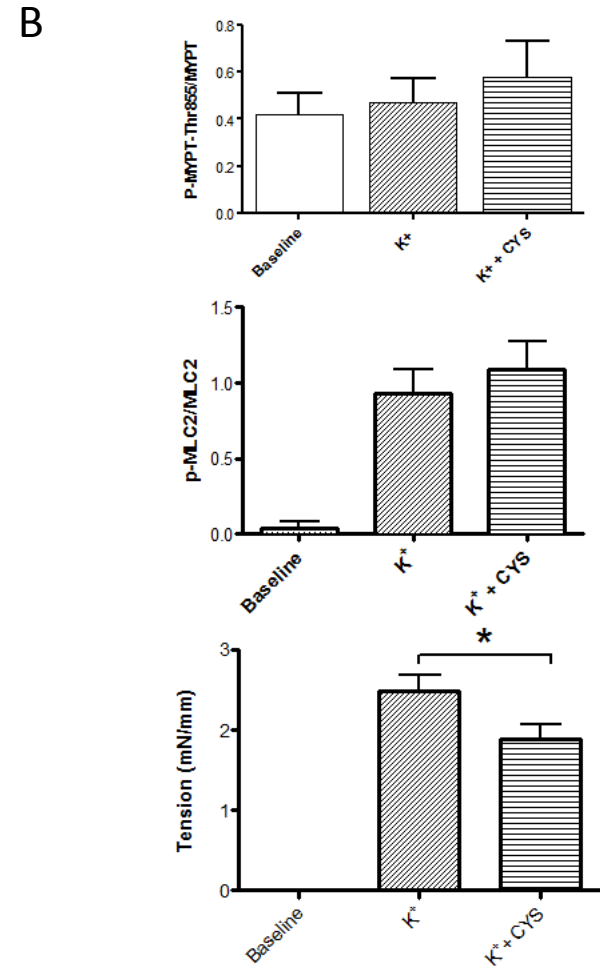
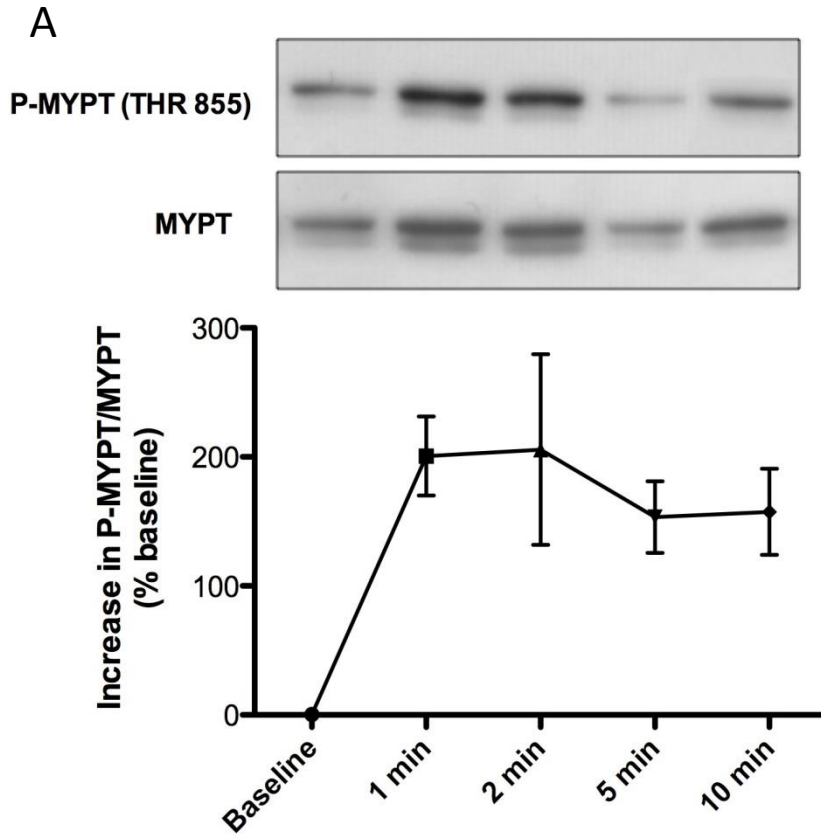
Suppl. Figure 1.



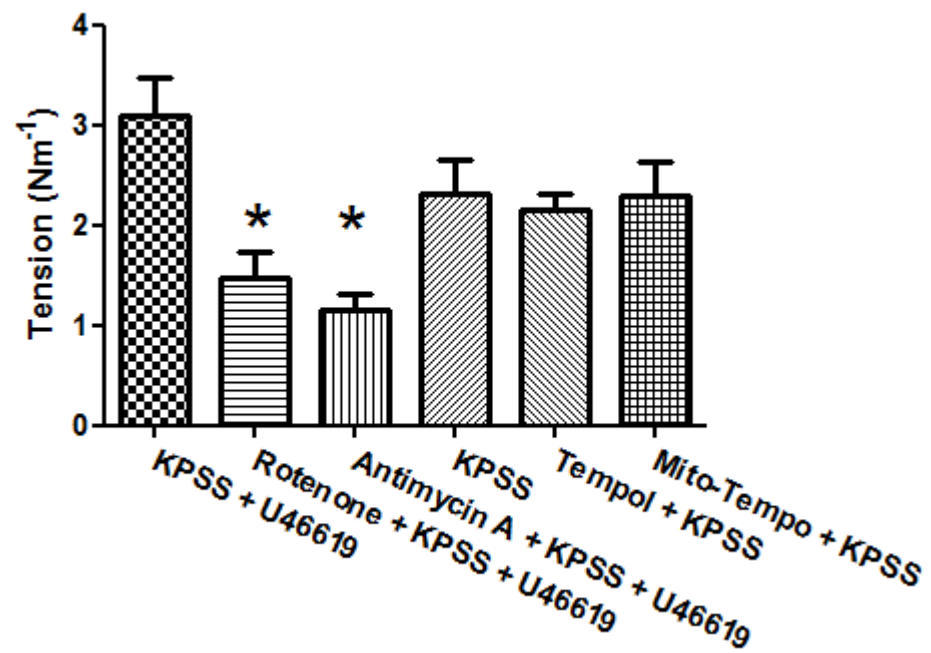
Suppl. Figure 2.



Suppl. Figure 3



Suppl. Figure 4



Suppl. Figure 5

Supplementary table 1. Primers used for detection of transglutaminases (*Tgm 1-7*)

Gene	Sense	Antisense	Bp
<i>Tgm1</i>	5'CTACCCGTA CTGTCA CCAACTTC'3	5'AATGGCTTTCTCTTCCACATACA'3	389
<i>Tgm2</i>	5'GAGCGGCATGGTCAACTGCAAT'3	5'GAGTGGTGACCAACTACA ACTCC' 3	571
<i>Tgm3</i>	5'CAGGAGAGAAGTCAAGGTGTGTT'3	5'CCAAAAGATGCATTAGGTTTGAGT T'3	328
<i>Tgm4</i>	5'GAAAGGGAGAAGAATGTCCTCAT'3	5'GTACAGGAAACACAGGGTCGTAT' 3	537
<i>Tgm5</i>	5'ATCAGTTTTGACCGTCTTGTTGT'3	5'TTGGTAGATGAAGCCATAATCGT'3	435
<i>Tgm6</i>	5'AAAGGAGAGAAGCTCCTGGTAGA'3	5'TAATCACAAAGCCCTTGATGTCT'3	325
<i>Tgm7</i>	5'TAGTCTTCAGTCGACCTTCCAG'3	5'TTGAACACCTAAGCATCTCATT'3	756

Suppl. Table 2

Table 1: Effect of cystamine on responses of rat mesenteric small arteries to phenylephrine, serotonin, U46619 and high potassium

Agonist	n	Control		Cystamine 10 ⁻⁵ M		Cystamine 10 ⁻⁴ M		Cystamine 10 ⁻³ M	
		E _{max}	pD ₂	E _{max}	pD ₂	E _{max}	pD ₂	E _{max}	pD ₂
Phenylephrine (10 μM)	6	3.90±0.36	5.66±0.07	3.66±0.40	5.62±0.07	1.40±0.44*	ND	0.00±0.00	ND
U46619 (0.5 μM)	5	4.04±0.59	7.06±0.12	3.47±0.30	7.08±0.07	1.21±0.83	ND	0.03±0.08	ND
5-HT (3 μM)	5	3.32±1.16	6.04±0.22	2.99±1.06	6.22±0.25	1.03±0.37	ND	0.03±0.01	ND
KPSS (125 mM)	6	2.59±0.30	1.37±0.06	2.04±0.16	1.33±0.04	1.83±0.15	1.41±0.21	0.11±0.02	ND

Values are means ± SEM and are calculated from the data in figure 2. Brackets indicate maximal concentration of agonist for which value E_{max} (Nm⁻¹) was calculated. pD₂ shows negative logarithm of concentration giving half-maximal response. n: number of arteries studied. ND= not determined because Emax was less than 50%.

Suppl. Table 3

Table 2: Level of contraction induced by phenylephrine (PhE, 10-100 μM) in the presence of different drug incubations.

	Drugs	n	N	PhE contraction (Nm^{-1})
Figure 3	Control	32	8	3.59 \pm 0.13
	Cadaverine	18	6	3.26 \pm 0.16
Figure 4	Control	8	8	3.49 \pm 0.12
	U73121 (5 μM)	7	7	2.00 \pm 0.36
	U73343 (10 μM)	6	6	2.38 \pm 0.11
Figure 7 (B,D)	Control	7	7	3.58 \pm 0.30
	Glibenclamide (1 μM)	7	7	3.66 \pm 0.31
	TEA (1 mM)	7	7	3.30 \pm 0.29
	XE991 (10 μM)	7	7	3.95 \pm 0.34
Figure 7 (C,E)	Control	11	11	2.89 \pm 0.53
	Linopirdine (10 μM)	8	8	2.73 \pm 0.35
	4-AP (100 μM)	6	6	2.90 \pm 0.18

Values are means \pm SEM and are calculated from the data in figures indicated in the left column. n: number of arteries studied. N: number of animals used.