Supplementary figure S1

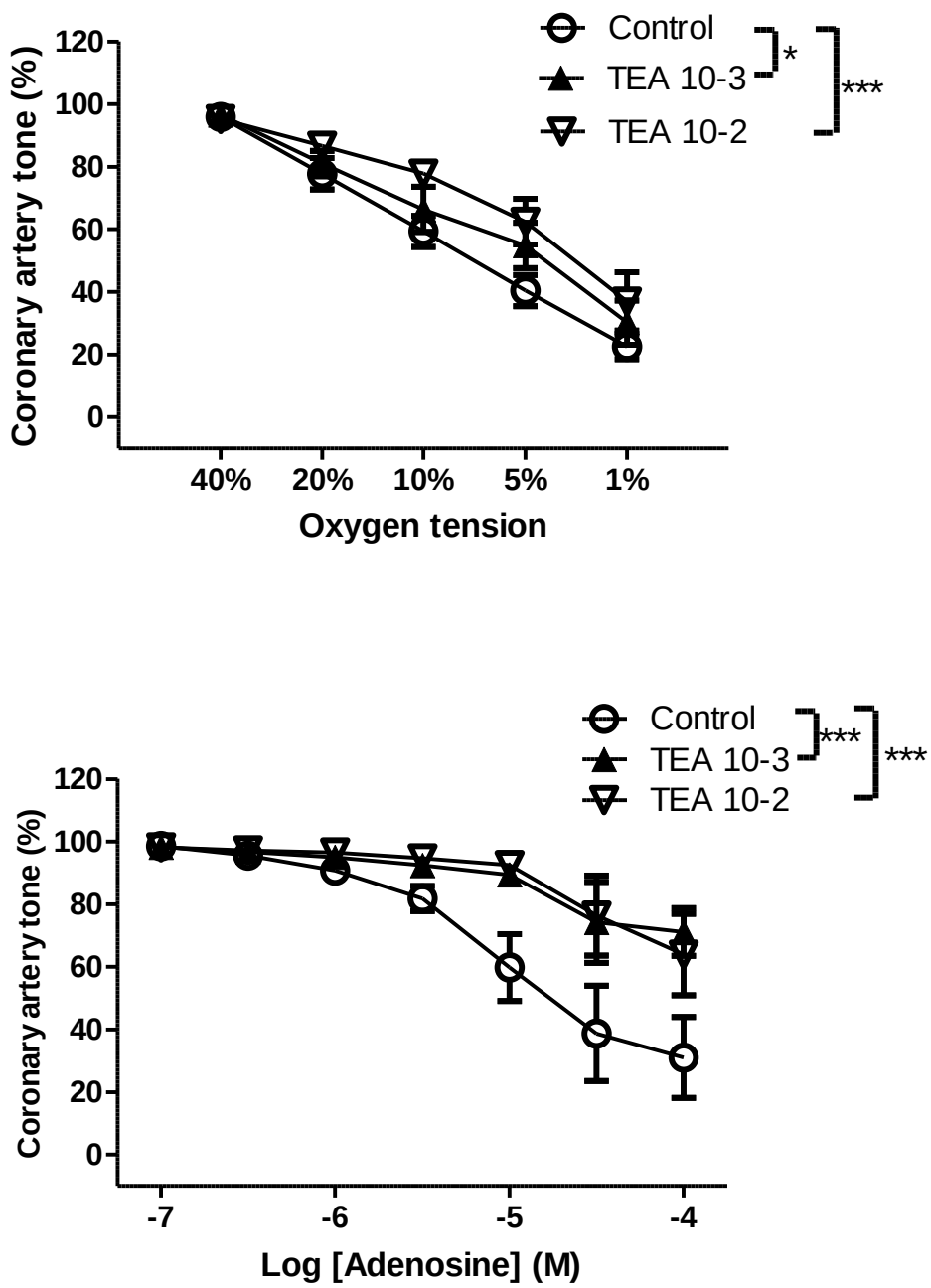

Figure S1. **Effect of K channel inhibition with TEA on hypoxia- and adenosine-induced dilatation in pig coronary artery.**

(A) Concentration-response curves for O_2 lowering in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 μM) in the absence and presence of the K channel inhibitor TEA (1 mM and 10 mM) (n=7, *P=0.046, ***P<0.001 by two way ANOVA). **(B)** Concentration-response curves for adenosine in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 μM) in the absence and presence of the K channel inhibitor TEA (1 mM and 10 mM) (n=7, ***P<0.001 by two way ANOVA).

Supplementary figure S2

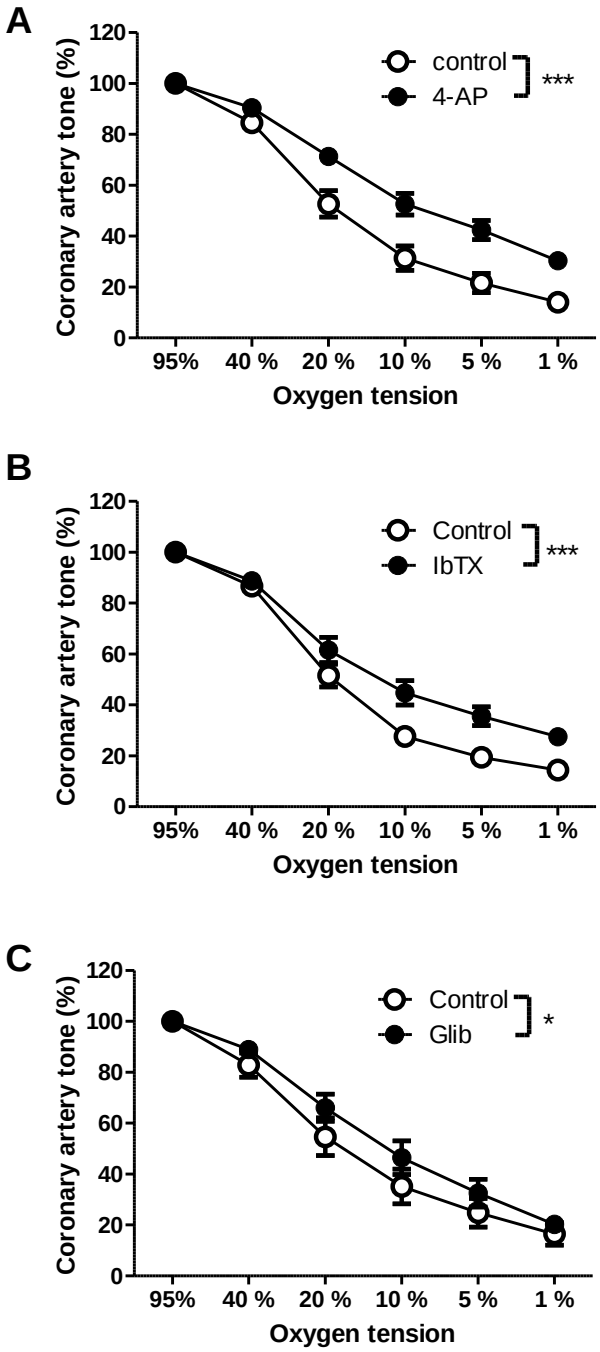

Figure S2. Effect of K channel inhibition on hypoxia-induced dilatation in pig coronary artery.

Concentration-response curves for O_2 lowering in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 μM) in the absence and presence of **(A):** 4-AP 0.5 mM (n=12, * P<0.001 by two way ANOVA), **(B):** IbTX 100 nM (n=6, * P<0.001 by two way ANOVA) or **(C):** glibenclamide 3 μM (n=7, * P<0.05 by two way ANOVA).

Supplementary figure S3

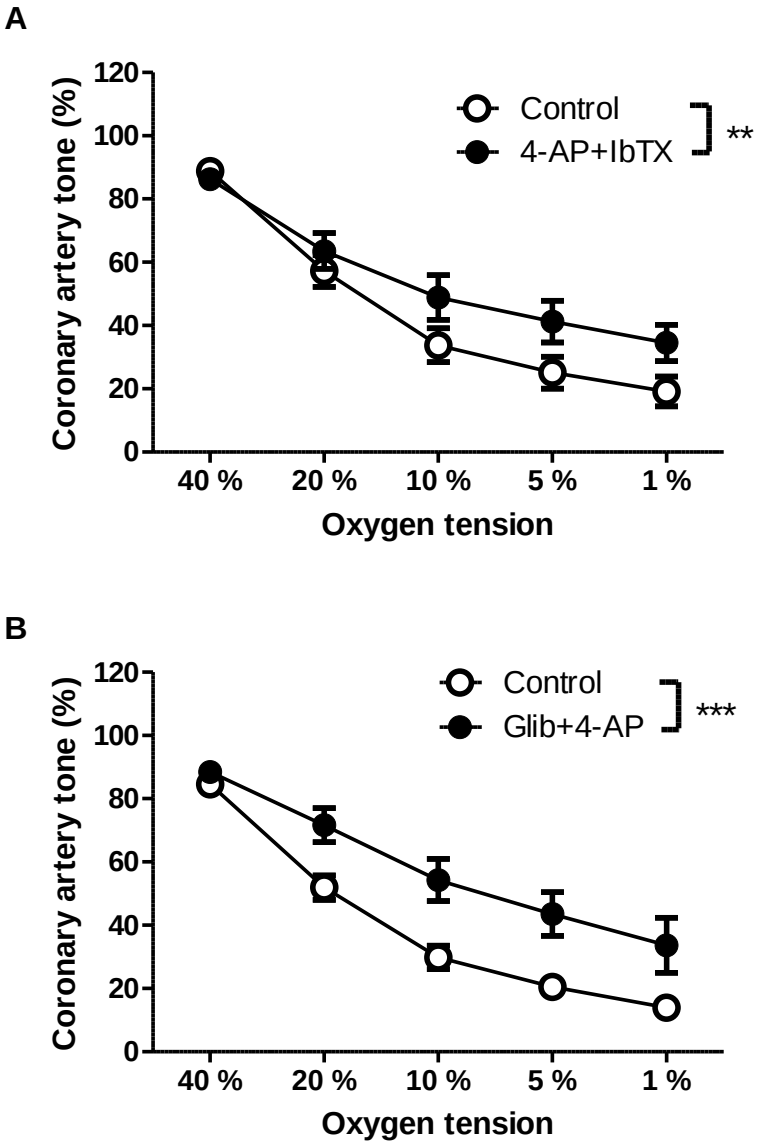

Figure S3. Effect of K channel inhibition on hypoxia-induced dilatation in pig coronary artery.

Concentration-response curves for O_2 lowering in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 µM) in the absence and presence of **(A):** 4-AP 0.5 mM and IbTX 100 nM (n=6, * P<0.01 by two way ANOVA), **(B):** Glibenclamide 3 µM and 4-AP 0.5 mM (n=6, * P<0.001 by two way ANOVA)

Supplementary figure S4

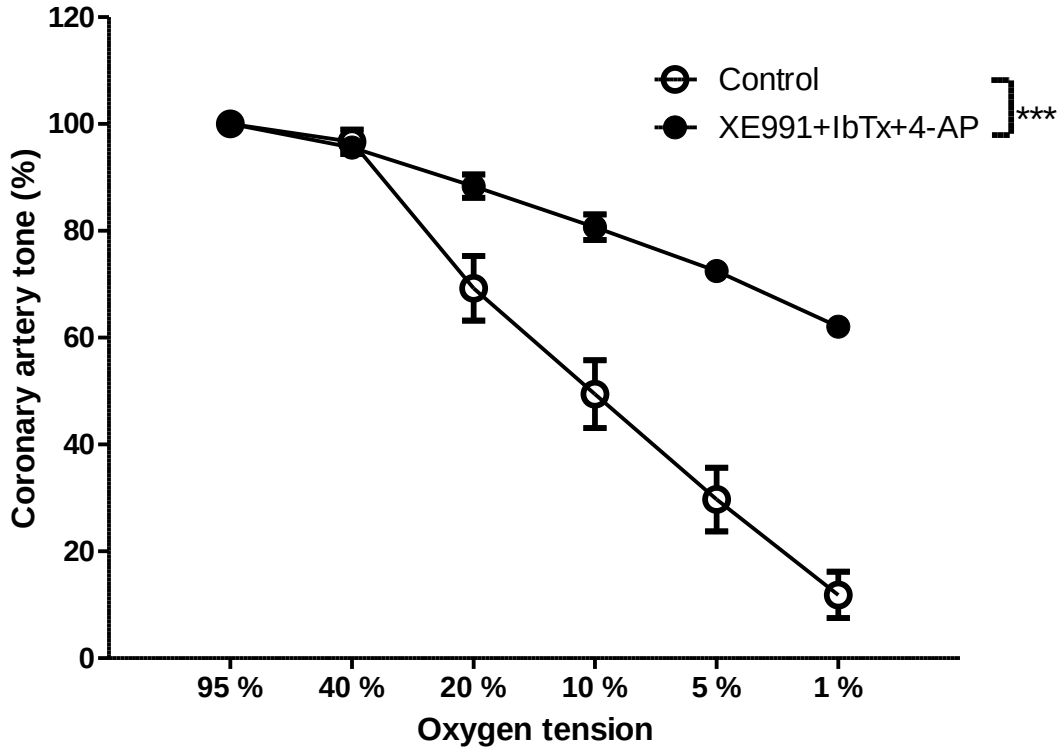

Figure S4.
Effect of K channel inhibition on hypoxia-induced dilatation in pig coronary artery.

Concentration-response curves for O_2 lowering in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 µM) in the absence and presence of XE991 10 µM, 4-AP 0.5 mM and IbTX 100 nM (n=7-8, *** P<0.001 by two way ANOVA),

Supplementary figure S5

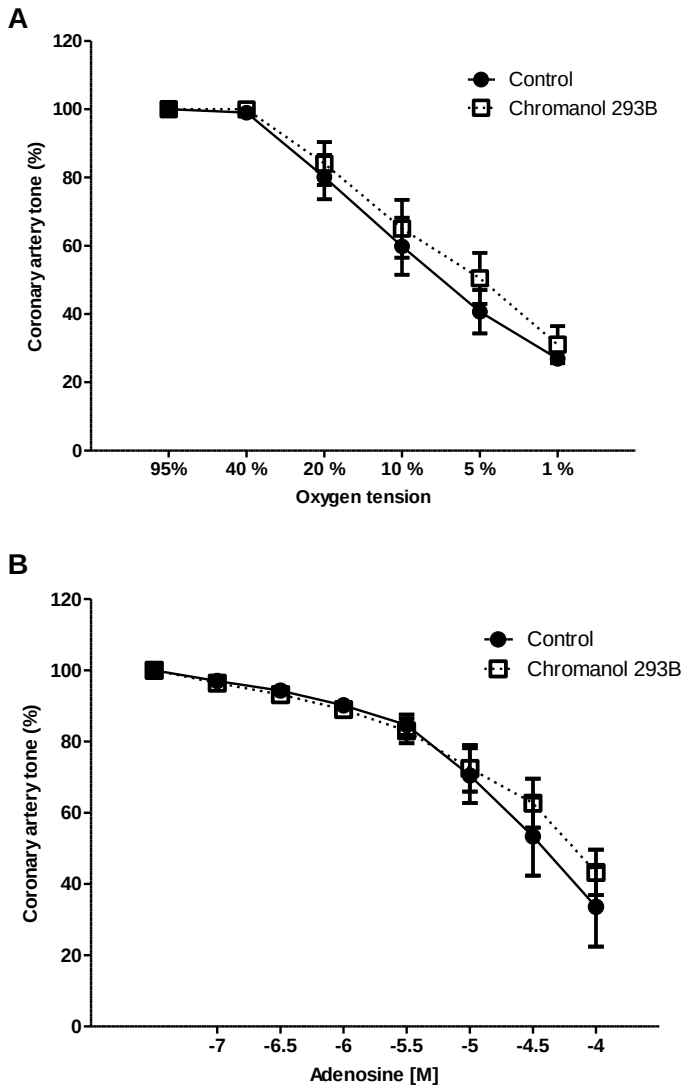

Figure S5. **Effect of K_V7.1 channel inhibition on hypoxia- and adenosine-induced dilatation in pig coronary artery.**

(A) Concentration-response curves for O_2 lowering in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 μM) in the absence and presence of the K_V7.1 channel inhibitor Chromanol 293B (10 μM) (n=5, P=0.22 by two way ANOVA). **(B)** Concentration-response curves for adenosine in coronary arterial segments without endothelium contracted with $PGF_{2\alpha}$ (10 μM) in the absence and presence of the K_V7.1 channel inhibitor Chromanol 293B (10 μM) (n=5, P=0.45 by two way ANOVA).

Supplementary figure S6

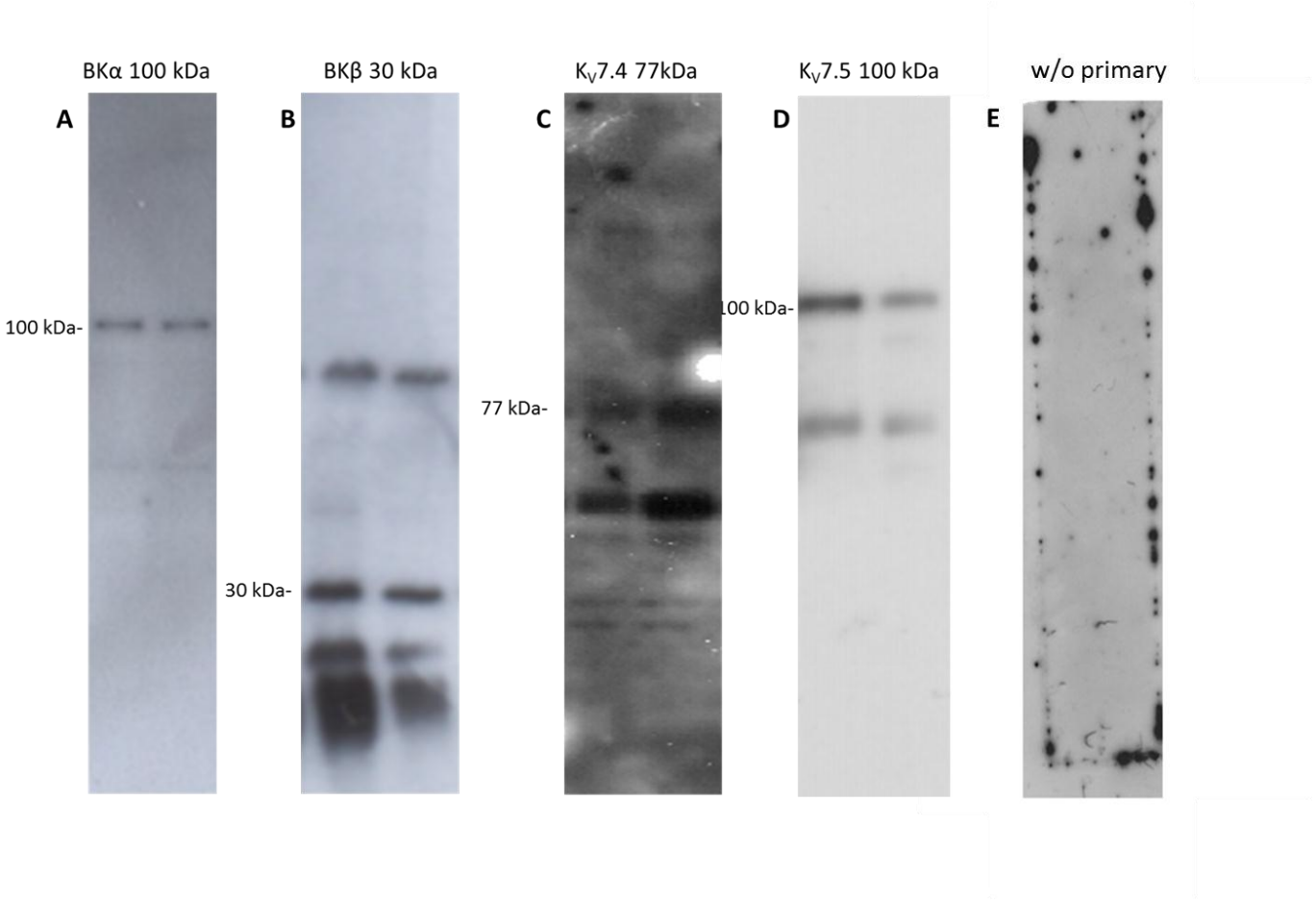

Figure S6. **Detection of BK_C and K_V7 K channels by immunoblotting.**

Immunoblot with samples from a normoxic artery in lane 1 and from a hypoxic artery in lane 2 and showing the presence of (A) $BK_{Ca}\alpha$ located at 100 kDa (B) $BK_{Ca}\beta$ located at 30 kDa (C) K_V7.4 located at 77 kDa and (D) K_V7.5 located at 100 kDa.(E) incubated with secondary antibody goat anti-rabbit IgG conjugated to HRP.