

Supplemental Table

Supplemental Table I | E_{\max} and EC_{50} comparisons for vascular reactivity dose response curves.

E_{\max} is expressed as % initial diameter and EC_{50} is the [PE] producing half of the maximum effect, expressed in $\mu\text{mol/L}$.

	Control	Hb α X	Scr X	Hbα X + L-NAME
E_{\max}	44.0 \pm 7.6	65.5 \pm 5.6	38.3 \pm 2.4	43.1 \pm 9.9
EC_{50}	2.1 \pm 0.8	26.7 \pm 12.5	2.0 \pm 1.3	1.9 \pm 0.2

Supplemental Figure Legends:

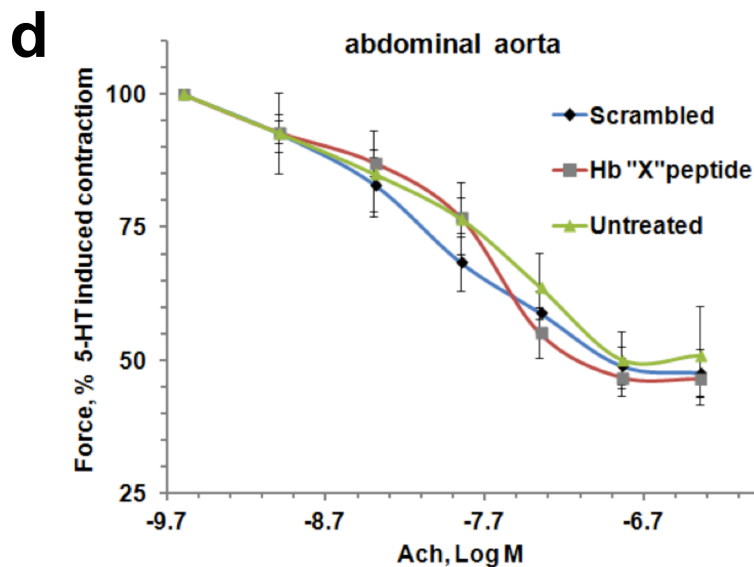
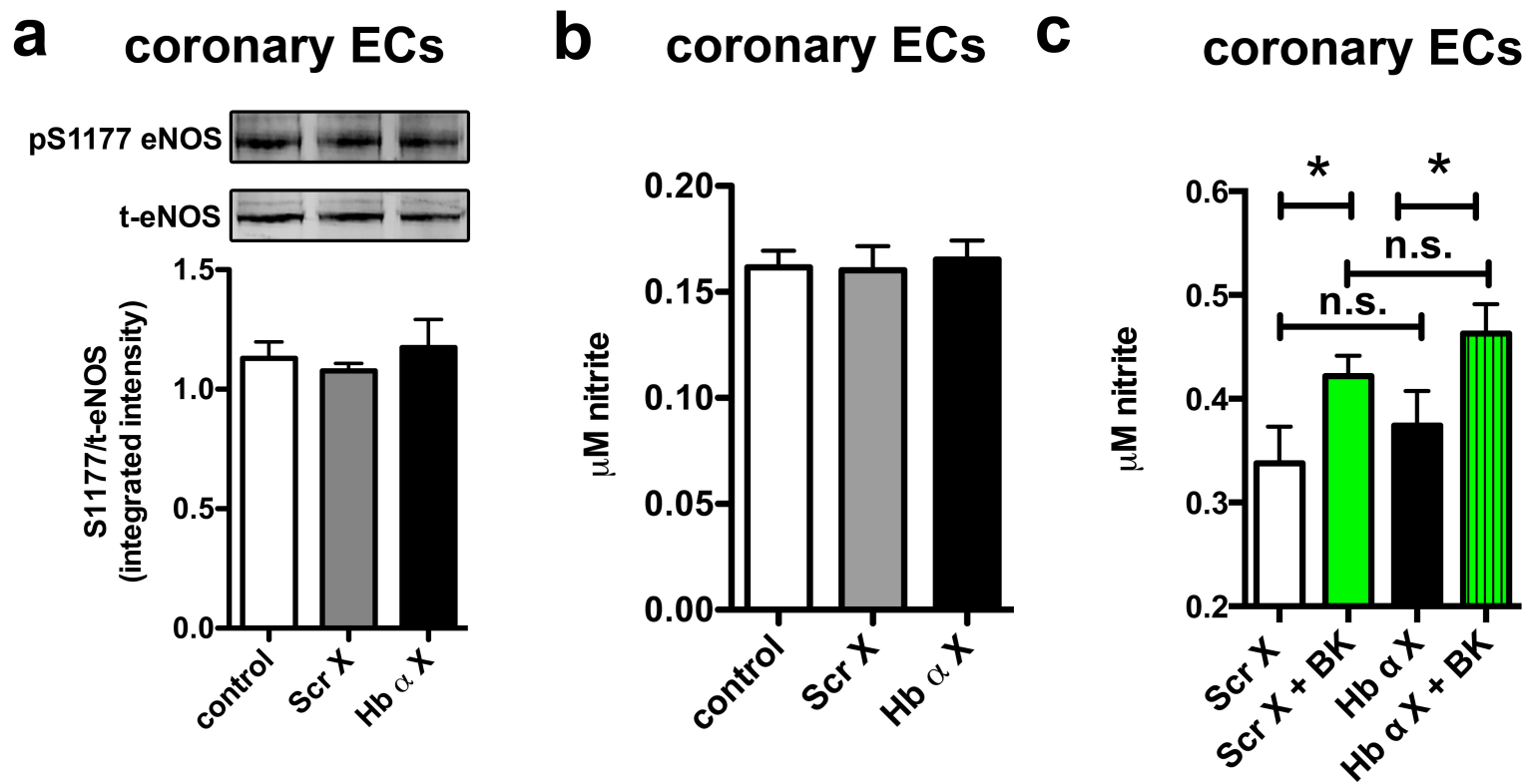
Supplemental Figure I | Hb α X peptide does not change eNOS phosphorylation, NO release in untreated and treated coronary endothelial cells or intact aortas. a, Western blot analysis of pS1177 eNOS and total eNOS from human coronary endothelial cells incubated with Scr X or Hb α X (n=3). b and c, Nitrite measurements from unstimulated and stimulated (10 μ M bradykinin, 5 minutes) human coronary endothelial cells treated with Scr X or Hb α X. In a and b n=3 and in c n=6. In d, abdominal aorta's had no effect on acetylcholine (Ach) dilation capacity in response to addition of Hb α X, a process almost completely mediated by endothelial NO production. All error bars represent s.e.m.

Supplemental Figure II | Basal tone measurements following Scr X or Hb α X and dose response to phenylephrine presented as a change in microns. a, shows the resting basal tone generated following 20 min peptide treatment. b, shows a dose response curve to phenylephrine with Scr X and Hb α X peptides expressed as diameter change in microns. n indicates the number of arteries; value in parenthesis shows number of mice. All error bars represent s.e.m.

Supplemental Figure III | Effects of Hb α X peptide on wildtype abdominal aortas. Cumulative dose response curve to PE from murine C57BL/6 abdominal aortic rings treated with control, Scr X or Hb α X. All error bars represent s.e.m.

Supplemental Figure IV | Representative tracing of MAP following Hb α X injection. Radiotelemetry recording of MAP following a single bolus injection of 5 mg/kg of Scr X or Hb α X.

Supplemental Figure V | Hb α X does not alter NO_x levels in RBCs. Isolated RBCs were treated with 5 μ mol/L Scr X and Hb α X for 30 minutes. All error bars represent s.e.m.

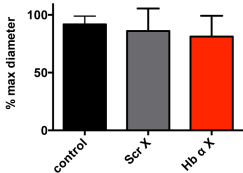


Supplemental Figure I

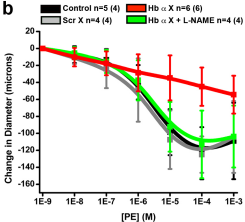
a

Supplemental Figure II

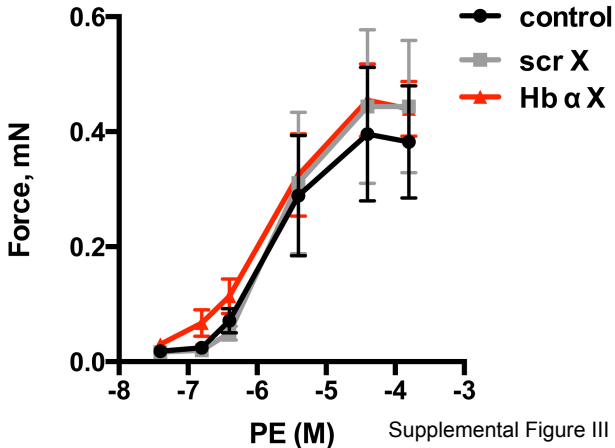
basal tone



b



C57BL/6 abdominal aorta



Representative Trace 1

