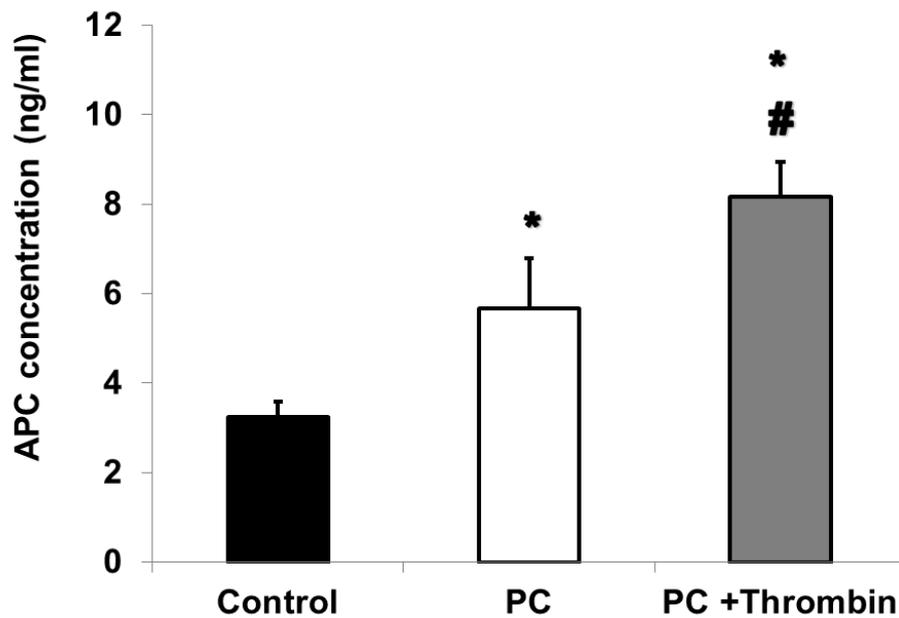
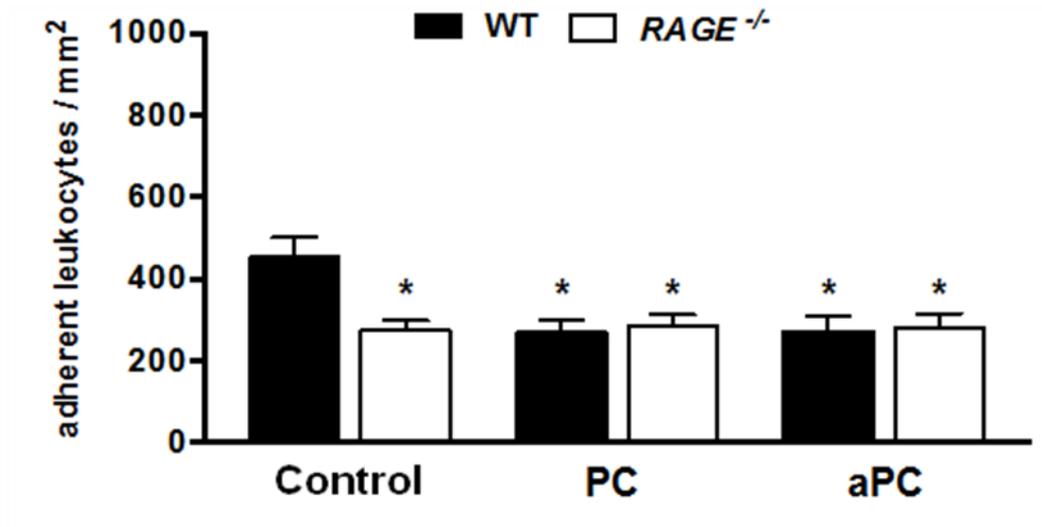


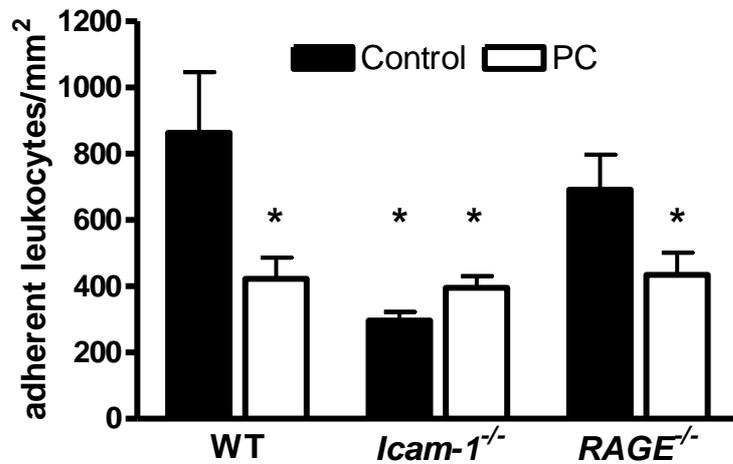
Supplemental Material



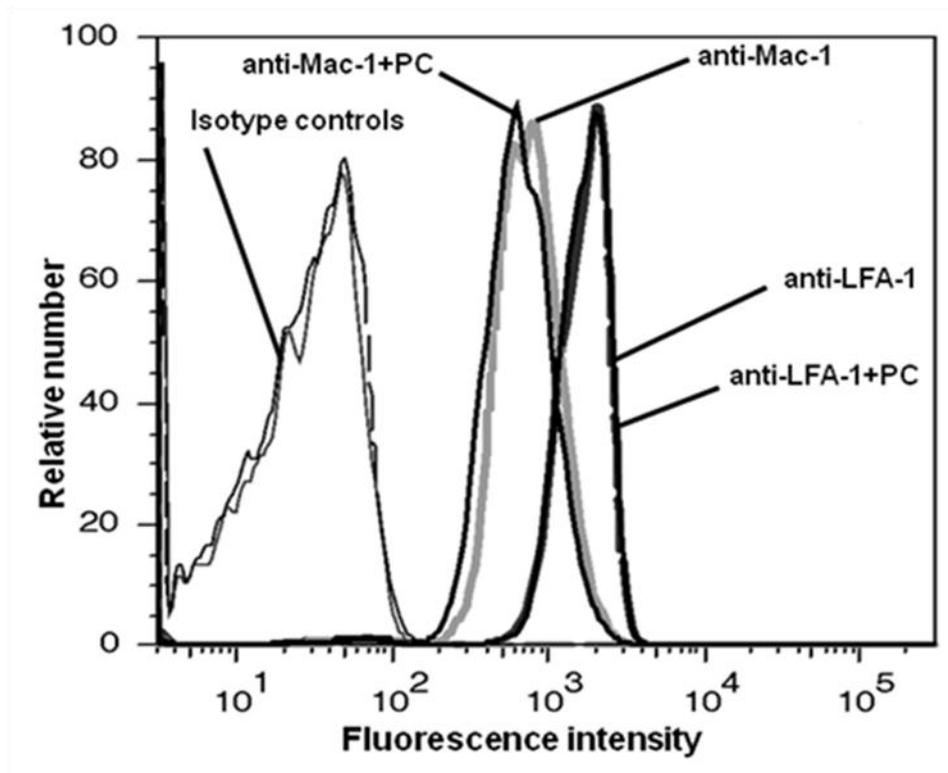
Supplemental Figure 1. *In vivo* activation of PC. TNF α -stimulated WT mice were treated with 100 U/kg PC for 30 min and compared to control mice. In some experiments, additionally administered human α -thrombin enhanced PC activation and served as positive control (PC + Thrombin). All values are presented as mean \pm SEM from at least three mice per group. Significant differences ($P < 0.05$) to control mice in are indicated by the asterisks and between PC & Thrombin and PC treated mice by the pound key.



Supplemental Figure 2. Comparison of PC and aPC-induced effects on leukocyte adhesion in wild-type (WT) and *RAGE*^{-/-} mice. Leukocyte adhesion (number of adherent cells per mm² of surface area) in cremaster muscle venules of wild-type (WT) control mice and *RAGE*^{-/-} mice treated with PC (100 U/kg, 3 hours) or aPC (24µg/kg/h, 3 hours) during trauma-induced inflammation. All values are presented as mean ± SEM from three or more mice per group. Significant differences (P < 0.05) to WT control mice are indicated by the asterisks.



Supplemental Figure 3. Effect of PC on CXCL1-induced leukocyte adhesion in wild-type (WT), *RAGE*^{-/-} - and *Icam-1*^{-/-} mice. Leukocyte adhesion (number of adherent cells per mm² of surface area) in cremaster muscle venules after systemic administration of 600 ng CXCL1 (KC) of wild-type (WT) control mice, *RAGE*^{-/-} mice and *Icam-1*^{-/-} mice treated with and without PC (100 U/kg, 3 hours) during trauma-induced inflammation. All values are presented as mean ± SEM from three or more mice per group. Significant differences (P < 0.05) to WT control mice are indicated by the asterisks.



Supplemental Figure 4: Effect of PC on expression of LFA-1 and Mac-1 on neutrophils. Surface expression of LFA-1 and Mac-1 on bone marrow-derived neutrophils with or without PC pre-incubation (5 U per 10⁶ leukocytes/ml, 3 h at 37°C) was compared to respective isotype controls. Representative histograms are shown from 3 separate experiments.

Supplemental Table 1: Hemodynamic parameters during intravital microscopic experiments

	<u>Mice</u>	<u>Venules</u>	<u>Diameter</u>	<u>Centerline Velocity</u>	<u>Wall Shear Rate</u>	<u>Systemic Leukocyte Counts</u>
	N	n	(μm)	($\mu\text{m/s}$)	(s^{-1})	(/ μl)
<u>Trauma-induced inflammation Genotype/Treatment (3 hours 100 U/kg PC)</u>						
WT	10	20	30 \pm 1	2500 \pm 100	1900 \pm 100	7300 \pm 300
WT PC	10	20	31 \pm 1	2700 \pm 100	2200 \pm 100	6200 \pm 400
<i>Icam-1</i> ^{-/-}	11	25	30 \pm 1	2300 \pm 100	2000 \pm 100	8000 \pm 1000
<i>Icam-1</i> ^{-/-} PC	13	32	31 \pm 1	2300 \pm 100	1800 \pm 100	9500 \pm 500
<i>RAGE</i> ^{-/-}	12	30	30 \pm 1	2500 \pm 100	2100 \pm 100	7000 \pm 700
<i>RAGE</i> ^{-/-} PC	11	25	29 \pm 1	2400 \pm 100	2000 \pm 100	7400 \pm 900
			n.s.	n.s.	n.s.	n.s.
<u>TNFα-induced inflammation Genotype/Treatment (3 hours 100 U/kg PC) pre and post fMLP</u>						
WT	10	58	29 \pm 1	2000 \pm 100	1900 \pm 100	4100 \pm 500
WT PC	11	60	28 \pm 1	2100 \pm 100	1700 \pm 100	3900 \pm 200
<i>Icam-1</i> ^{-/-}	7	40	31 \pm 1	1900 \pm 100	1700 \pm 100	4400 \pm 500
<i>Icam-1</i> ^{-/-} PC	11	44	31 \pm 1	2000 \pm 50	1800 \pm 100	4200 \pm 300
<i>RAGE</i> ^{-/-}	11	49	29 \pm 1	2200 \pm 100	2000 \pm 100	3600 \pm 200
<i>RAGE</i> ^{-/-} PC	12	62	29 \pm 1	2200 \pm 100	1900 \pm 100	3800 \pm 200
			n.s.	n.s.	n.s.	n.s.

Vessel diameter, centerline velocity and wall shear rate of surgically prepared cremaster muscle venules (Trauma) and tumor necrosis factor α (TNF α)-stimulated (pre and post fMLP-superfusion) cremaster muscle venules of wild-type (WT), *Icam1*^{-/-} - and *RAGE*^{-/-} mice with and without PC are presented as mean \pm SEM.

n.s., not significant.