

Figure S1. Lymph endothelial cells (LECs) were stimulated with 1  $\mu$ M 12(S)-HETE for 45 min when RNA was isolated for RT-qPCR to analyse the expression of *SOX18* mRNA. The experiment was performed in triplicate. Error bars show  $\pm$  SEM of at least 3 measurements. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

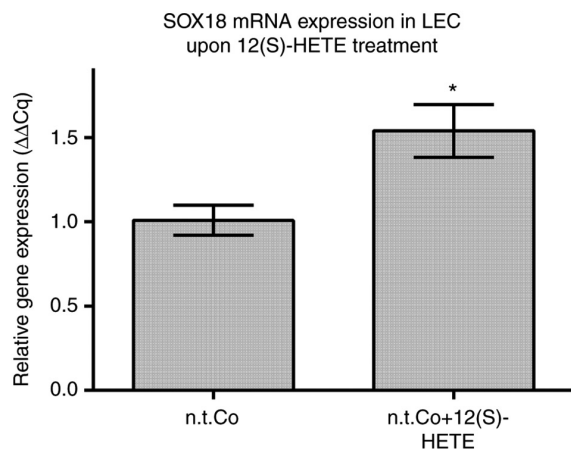


Figure S2. Lymph endothelial cells (LECs) were stimulated with 1  $\mu$ M 12(S)-HETE for 45 min when protein was isolated for western blotting to analyse the expression of SOX18 protein. Ponceau S staining (not shown) and  $\beta$ -actin expression served as loading controls. Relative protein expression was quantified by densitometry (ImageJ). All experiments were performed in triplicate. Error bars show  $\pm$  SEM of at least 3 measurements. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to Co).

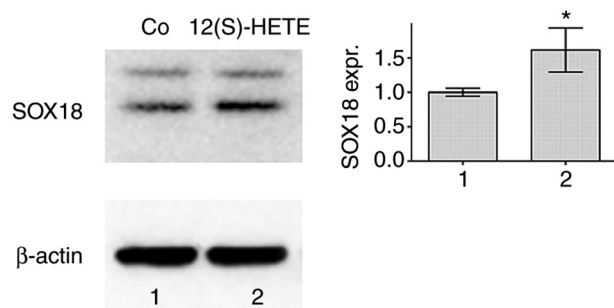


Figure S3. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *RELA* (siRELA) or non-targeting RNA (n.t.Co) and the mRNA expression of *RELA* mRNA was determined by RT-qPCR (~55% knock-down efficiency). Experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

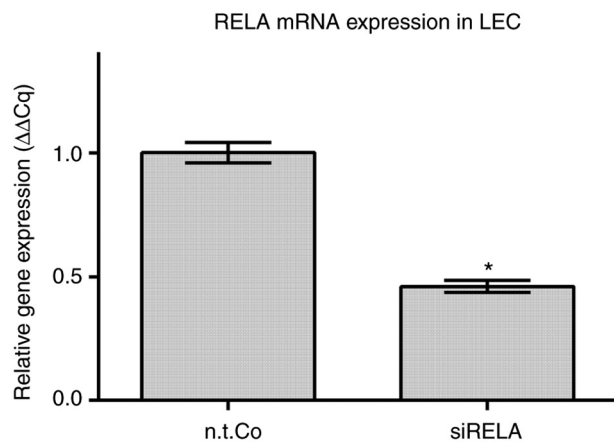


Figure S4. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *RELA* (siRELA), or with non-targeting RNA (n.t.Co) and stimulated with 1  $\mu$ M 12(S)-HETE for 45 min. Then, RNA was isolated for RT-qPCR to analyse the expression of *ICAM-1* to demonstrate that expression of *ICAM-1* mRNA is controlled by *RELA*. All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (ANOVA/Tukey's post hoc test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co) and hashtag [compared to 12(S)-HETE stimulation].

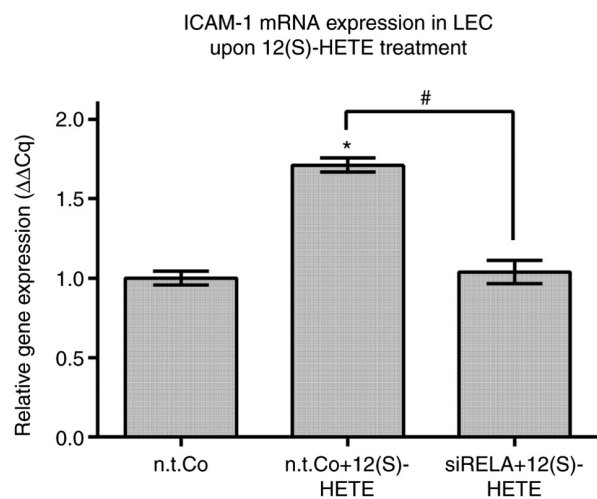


Figure S5. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *SOX18* (siSOX18), or with non-targeting RNA (n.t.Co) and stimulated with 1  $\mu$ M 12(S)-HETE for 45 min. Then, RNA was isolated for RT-qPCR to analyse the expression of *PROX1*. All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (ANOVA/Tukey's post hoc test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co) and hashtag [compared to 12(S)-HETE stimulation].

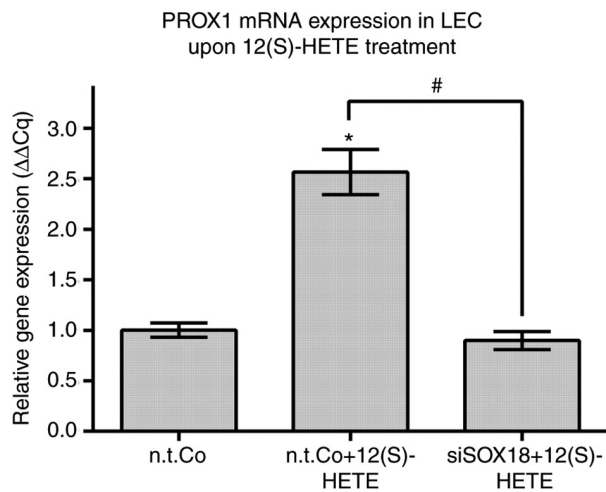


Figure S6. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *SOX18* (siSOX18) or non-targeting RNA (n.t.Co) and the mRNA expression of *SOX18* mRNA was determined by RT-qPCR (~65% knock-down efficiency). Experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

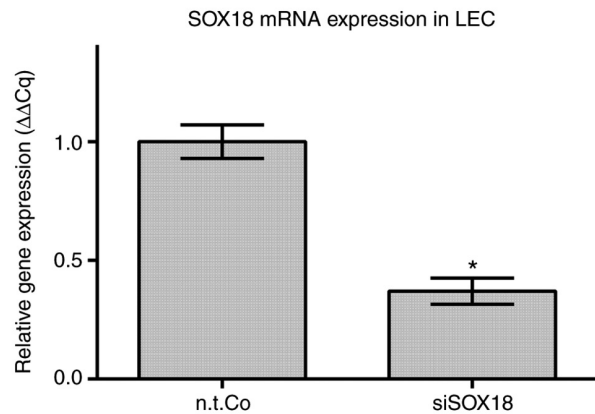


Figure S7. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *SOX18* (siSOX18) or non-targeting RNA (n.t.Co) and the protein expression of SOX18 was determined by western blotting (~40% knock-down efficiency). Ponceau S staining (not shown) and  $\beta$ -actin expression served as loading controls. The relative protein expression was quantified by densitometry (ImageJ). All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

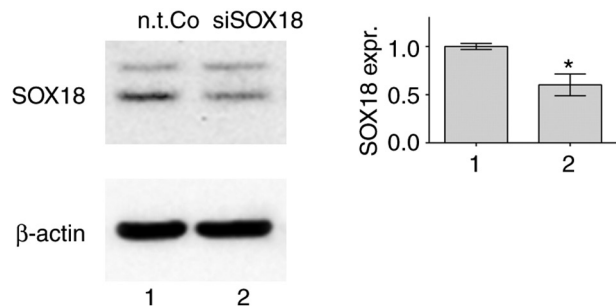


Figure S8. Schematic presentation: RELA (to the left side) and SOX18 (to the right side) negatively regulate constitutive phosphorylation of FAK in lymph endothelial cells.

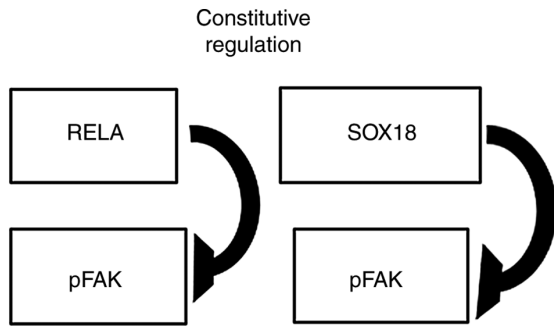




Figure S9. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *FAK* (siFAK) or with non-targeting RNA (n.t.Co) and the protein expression of FAK was determined by western blotting (~60% knock-down efficiency). Ponceau S staining (not shown) and  $\beta$ -actin expression served as loading controls. The relative protein expression was quantified by densitometry (ImageJ). All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

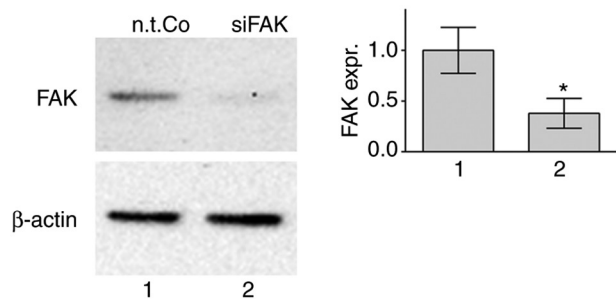


Figure S10. HCT116 colon cancer cells were treated with 40  $\mu$ M proadifen, 40  $\mu$ M guanfacine or 40  $\mu$ M vinpocetine for 4 h. DMSO served as a solvent control (Co). Then, 12(S)-HETE from the cell culture supernatant was measured using an immuno-assay kit. Picogram values were normalised to cell number. Error bars show  $\pm$  SEM of at least 3 measurements. Statistical significance (t-test and ANOVA/Tukey's post hoc test) was set to  $P < 0.05$  and is indicated by asterisks (compared to Co).

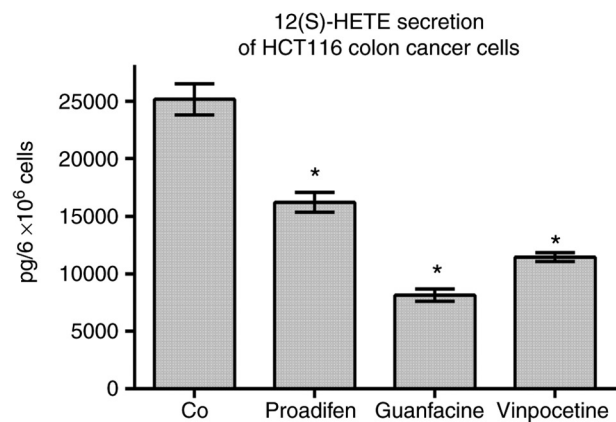


Figure S11. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *ICAM-1* (siICAM-1) or non-targeting RNA (n.t.Co) and the protein expression of ICAM-1 was determined by western blotting (~50% knock-down efficiency). Ponceau S staining (not shown) and  $\beta$ -actin expression served as loading controls. The relative protein expression was quantified by densitometry (ImageJ). All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

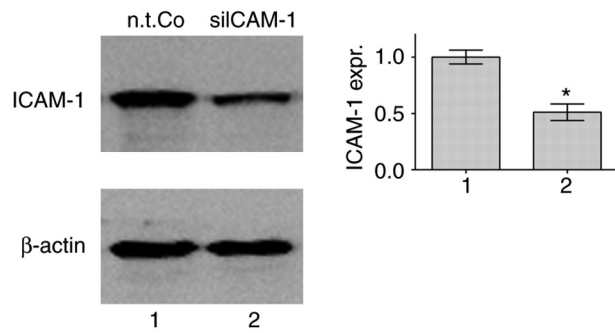


Figure S12. Lymph endothelial cells (LECs) were transiently transfected with siRNA targeting *PROX1* (siPROX1) or non-targeting RNA (n.t.Co) and the protein expression of PROX1 was determined by western blotting (~55% knock-down efficiency). Ponceau S staining (not shown) and  $\beta$ -actin expression served as loading controls. The relative protein expression was quantified by densitometry (ImageJ). All experiments were performed in triplicate. Error bars show  $\pm$  SEM. Statistical significance (t-test) was set to  $P < 0.05$  and is indicated by an asterisk (compared to n.t.Co).

