

Description of Additional Supplementary Files

Supplementary Movie 1. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of apoE^{-/-} background cyp27a1 fl/fl mice. 4 week-old male mice were injected with 100 ul rhodamine-6G (0.05% w/v) via the optic vascular plexus to label leukocytes. Under anesthesia, the mesentery was exposed on a clear dish, and images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.

Supplementary Movie 2. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of apoE^{-/-} background cyp27a1 Δ MAC mice. Using the approach described for Supplementary Movie 1, images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.

Supplementary Movie 3. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of ER α fl/fl control mice administered vehicle. 4 week-old male mice received daily subcutaneous injections of vehicle for 3 days. On day 4 leukocytes were labeled by the administration of rhodamine-6G, and images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.

Supplementary Movie 4. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of ER α fl/fl control mice administered 2 27HC. 4 week-old male mice received daily subcutaneous injections of 27HC for 3 days. On day 4 leukocytes were labeled by the administration of rhodamine-6G, and images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.

Supplementary Movie 5. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of mice selectively deficient in ER α in endothelial cells (ER α Δ EC) administered vehicle. 4 week-old male mice received daily subcutaneous injections of vehicle for 3 days. On day 4 leukocytes were labeled by the administration of rhodamine-6G, and images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.

Supplementary Movie 6. Intravital microscopy of leukocyte-endothelial cell adhesion in the mesenteric microcirculation of ER α Δ EC mice administered 27HC. 4 week-old male mice received daily subcutaneous injections of 27HC for 3 days. On day 4 leukocytes were labeled by the administration of rhodamine-6G, and images of leukocyte adhesion and rolling in the mesenteric microvasculature were recorded.