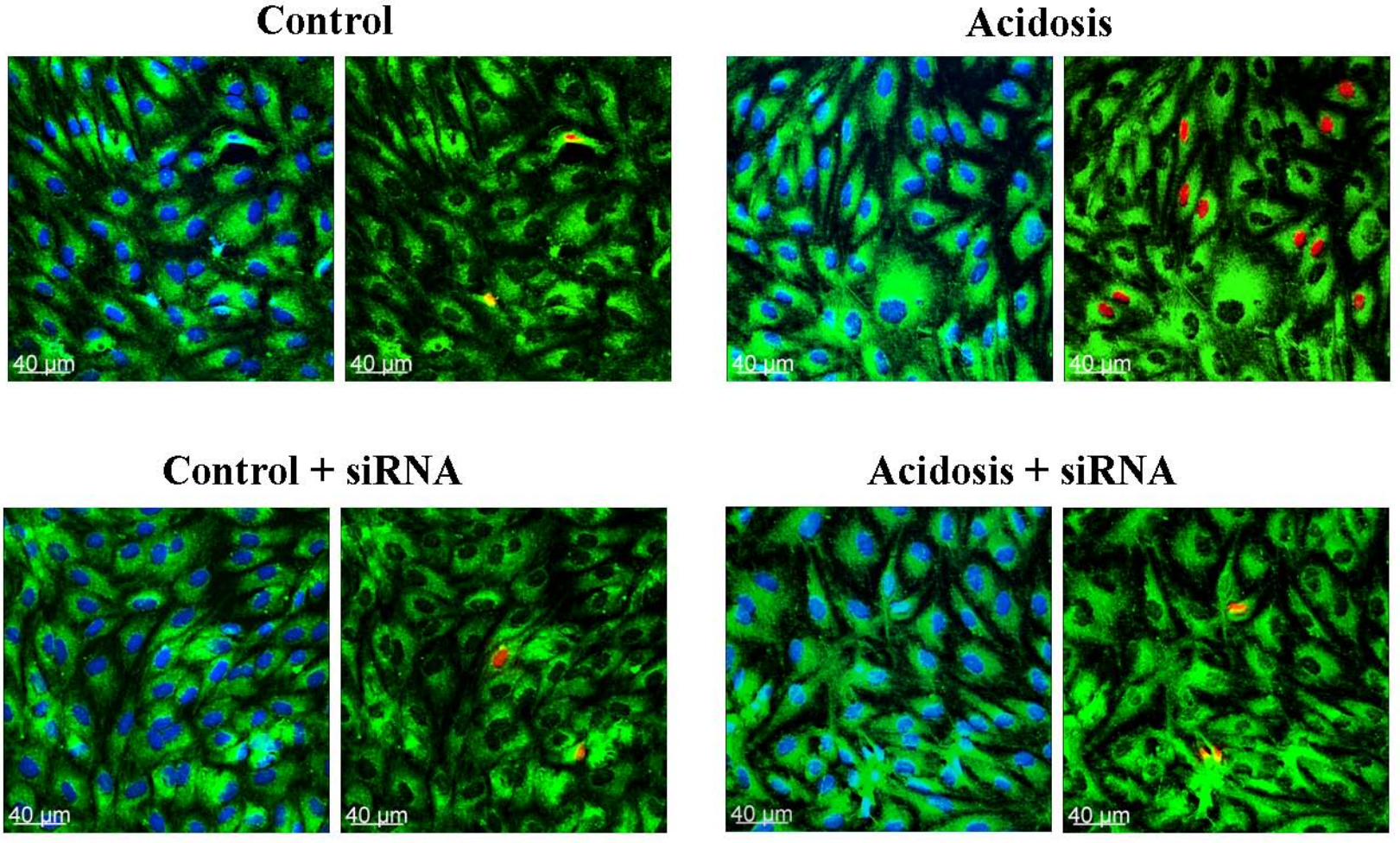
Supplemental Data: Fig. 1. Representative images of the TUNEL-staining in control EC or in EC after 3 hours of acidic exposure without or with sAC knock-down (treatment with siRNA). Images show DAPI-staining of nuclei (blue), staining with specific antibodies against von Willebrand factor (green) and TUNEL-positive nuclei (red).

Supplemental Data: Fig. 2. Immunostaining analysis of mitocondrial localization of sAC in untreated EC. sAC is labeled with specific antibodies (A, green) and mitochondria with MitoTracker (B, red). Nuclei are stained blue with DAPI. Image D shows the marked field from merge image C with 4-fold magnification.

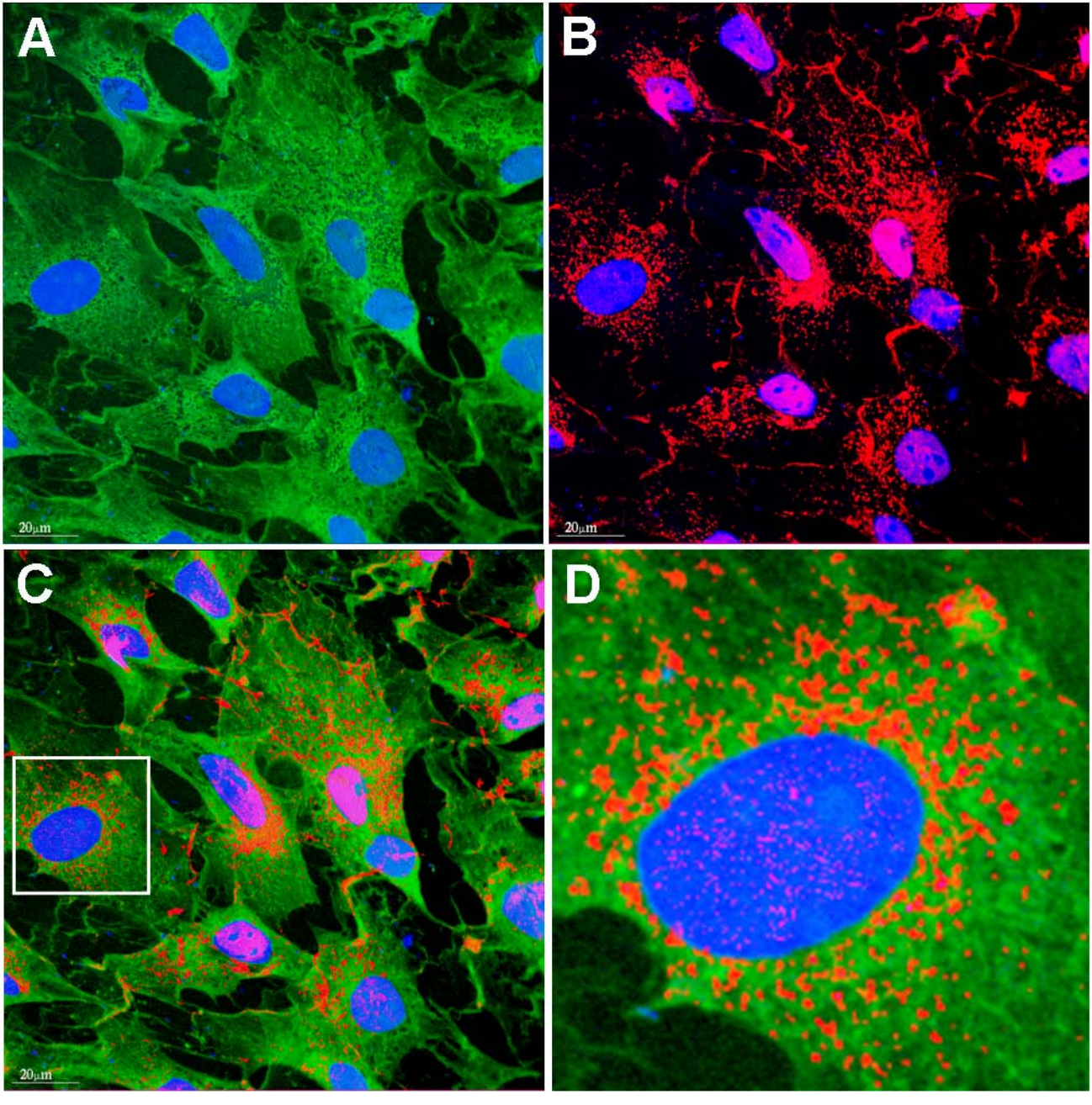
Supplemental Data: Fig. 3. Immunostaining analysis of mitochondrial localization of sAC in EC treated with acidosis for 3 hours. Similar staining conditions as shown on Supplemental Fig. 2. Yellow spots on merge image (C) represent the co-localization of sAC with mitochondria. Note that the majority of mitochondria in acidosis treated EC show a co-localization with sAC.

Supplemental Data: Fig. 4. Representative histograms (A-B) showing the results of single measurements of fluorescence intensity (green for sAC and red for MitoTracker) in regions of interest, i.e. mitochondria, followed by statistical analysis of co-localization of sAC with mitochondria (C). Note that majority of cells (ca. 93%) demonstrate high level (>80%) mitochondrial localization of sAC under acidic stress. In contrast the majority of control cells (ca. 98%) demonstrate low level (<10%) of mitochondrial localization of sAC.

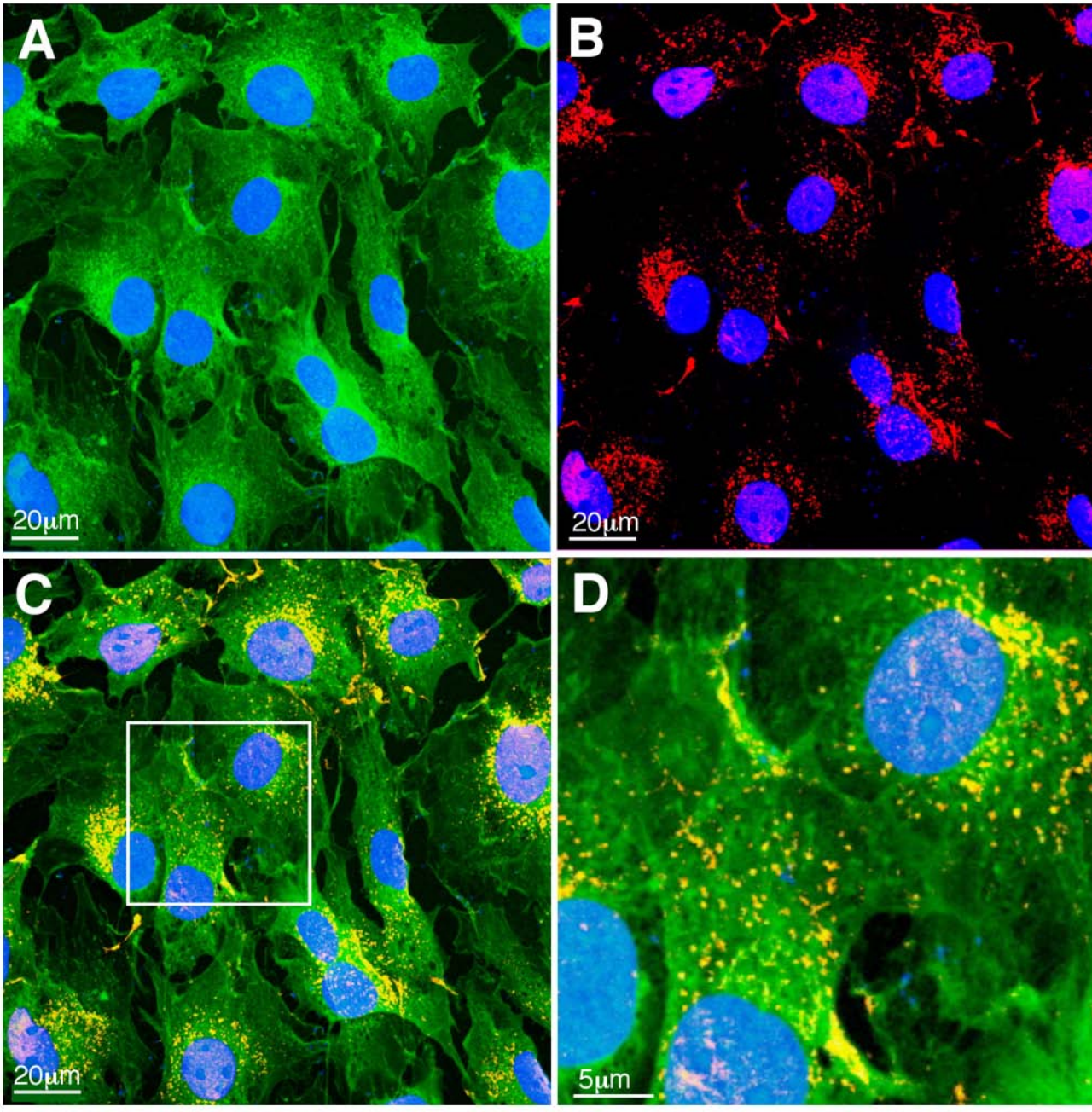
Supplemental Data: Fig.1



Supplemental Data: Fig.2



Supplemental Data: Fig.3



Supplemental Data: Fig.4