Identification of human umbilical vein endothelial cells

Materials and Methods

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For the identification of human umbilical vein endothelial cells (HUVECs), the HUVECs were gently rinsed with 37°C phosphate buffered saline (PBS) and fixed them with 4% paraformaldehyde for 15 minutes. Cells samples were permeabilize by 0.5% Triton X-100 (Sigma-Aldrich) at room temperature for 5 minutes. Then the HUVECs samples were incubated with rabbit anti-CD31 antibody (1:50, Cat# ab281583, Abcam) overnight at 4°C. Goat anti-rabbit secondary antibody (1:200, RRID:AB_2650602, Cat# ab150080, Abcam) were then incubated with the HUVECs samples in the dark for 2 hours at room temperature. The samples were softly washed by PBS and incubated with and 4′,6-diamidino-2-phenylindole dihydrochloride (DAPI, 1:1000; Sigma-Aldrich) at room temperature for 30 minutes. After that, a fluorescence microscope (Leica) was used to image the cells samples.

Results

As shown in the **Figure** 1, the coincidence rate of CD31 and DAPI was 100%, so it could be considered that the purity of HUVECs meets the experimental requirements.

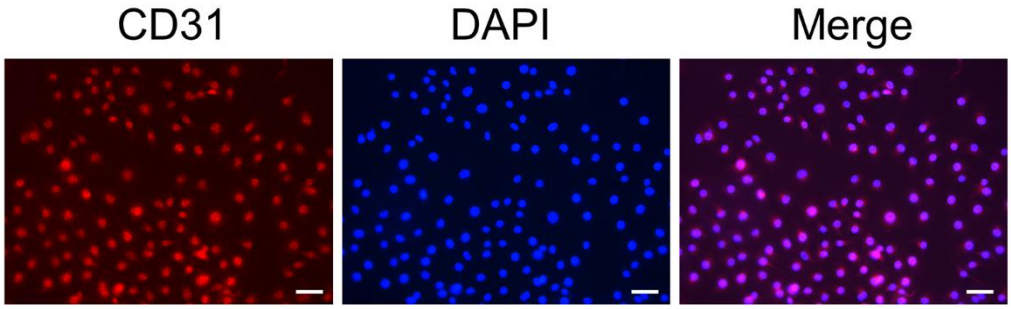

Figure 1 Identification of HUVECs

HUVECs (marked by CD31, red, Alexa Fluor 594)/ nucleus (blue, DAPI) staining. The coincidence rate of CD31 and DAPI was 100%. Scale bars: 50 μm. DAPI: 4′,6-Diamidino-2-phenylindole dihydrochloride; HUVECs: human umbilical vein endothelial cells.