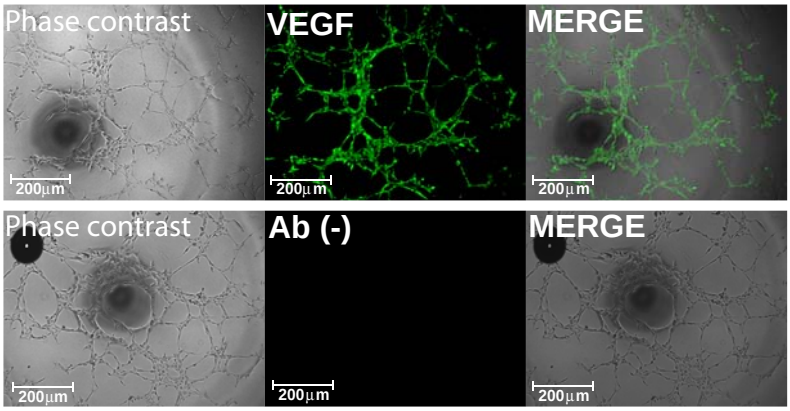
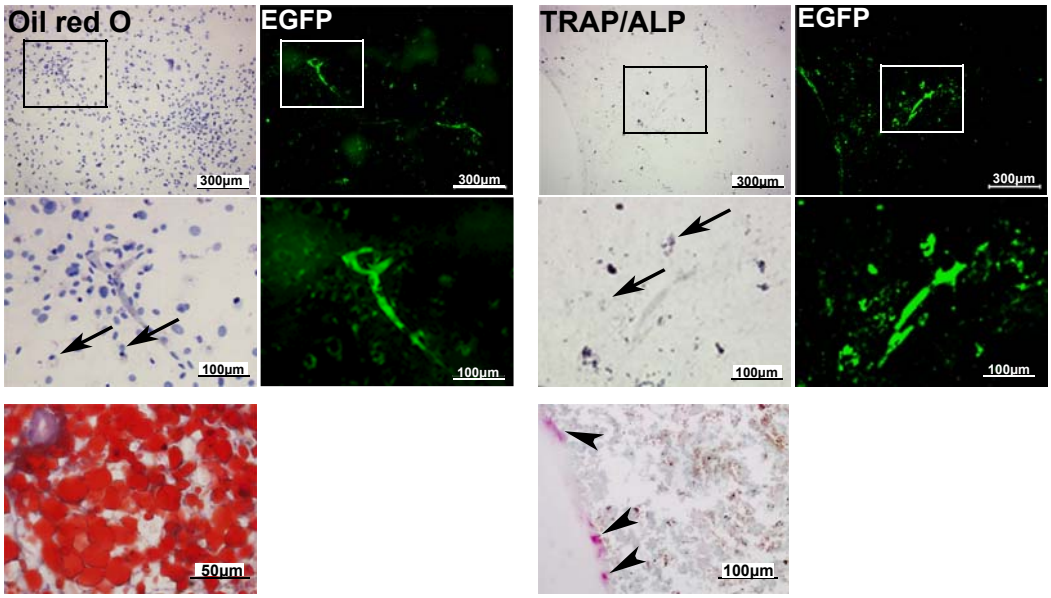
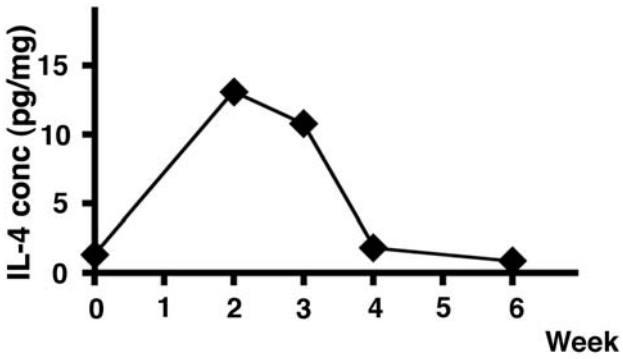


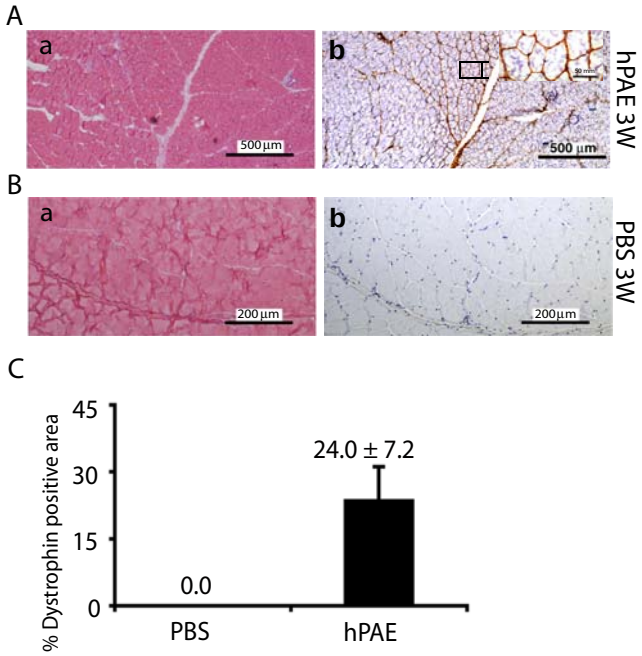
Suppl. Fig. S1 Immunocytochemistry of hPAE cells expressing VEGF. The antibody against VEGF (clone:EP1176Y Abcam plc) was used as the first antibody and Alexa-Fluor-conjugated goat anti-rabbit IgG was used as the second antibody. “Ab (-)” represents an omission of the first antibody as negative control (left panels).



Suppl. Fig. S2 The ability of differentiate into other cell lineages in the hPAE cells. EGFP-labled hPAE cells were co-cultured with neonatal murine thymocytes. (A) Oil red and hematoxylin staining on hPAE cells at 21 days after the start of co-cultivation. The middle panels show a higher magnification image of the framed area in the top panels. Arrows show EGFP-positive hPAE cells. The lower panel shows an adipose tissue that used as a positive control. (B) TRAP and ALP staining on hPAE cells at 21 days after the start of co-cultivation. The middle panels show a higher magnification image of the framed area in the top panels. Arrows show EGFP positive hPAE cells. The lower panel shows bone tissue that used as a positive control. Allow heads show TRAP-positive osteoclasts.



Suppl. Fig. S3 IL-4 concentration (conc) in BALB/c mouse muscle
The levels of IL-4 in muscle tissues were measured 0, 2, 3, 4 and 6 weeks after injection of hPAE cells. IL-4 production reached a maximum after two weeks.



Suppl. Fig. S4 Conferral of dystrophin by hPAE cell implantation to host myotubes in BALB/c mice

Microscopic view perpendicular to the longitudinal axis of the myotubes. hPAE cells (a) and PBS (b) were injected into the right and left thigh muscles, respectively. Immunohistochemistry was performed on frozen sections fixed with methanol three weeks after injection, using a mouse monoclonal antibody that specifically reacts to human dystrophin (NCL-DYS3, Novocastra Newcastle upon Tyne, UK). (a, b) Left panels: HE stain; Right panels: immunohistochemistry. (c) Quantitative analysis of human dystrophin-positive myotubes. The percentage of human dystrophin positive-myofiber areas was calculated three weeks after implantation of hPAE cells. n = 8, *p < 0.05. Injection of PBS into BALB/c myofibers was used as a control.