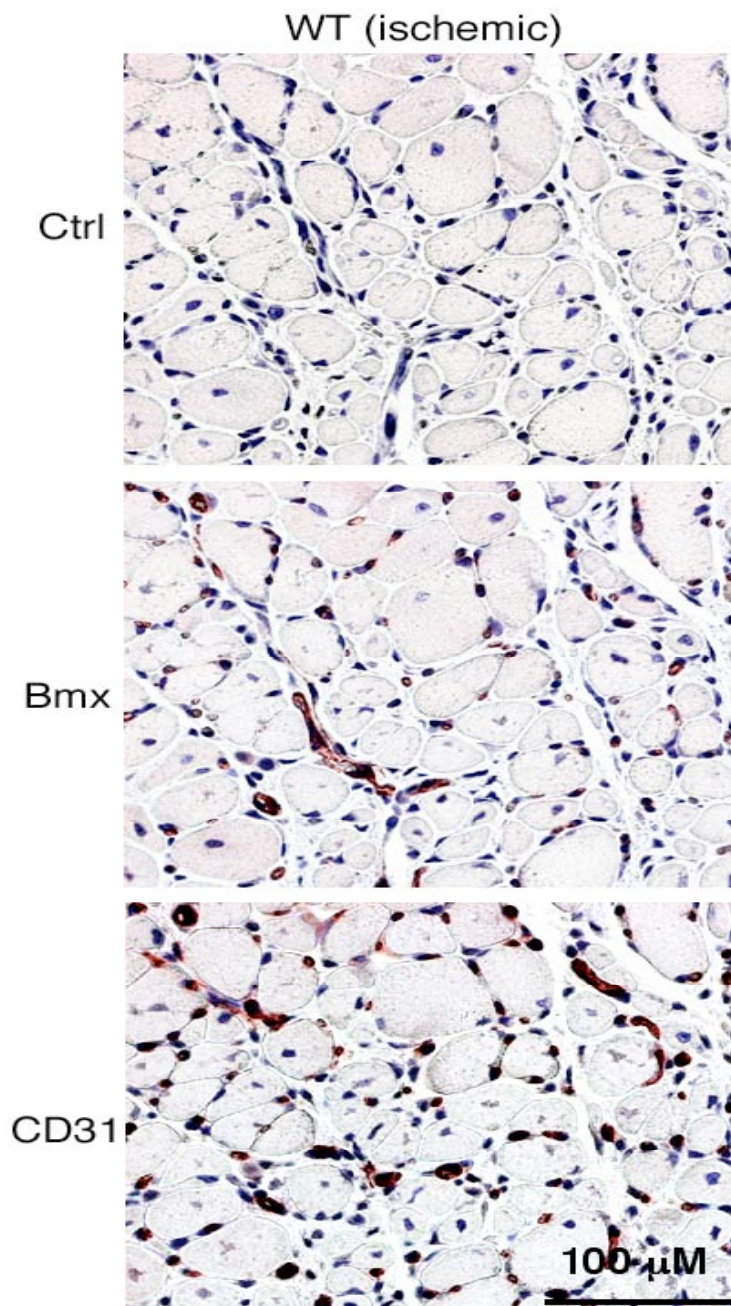
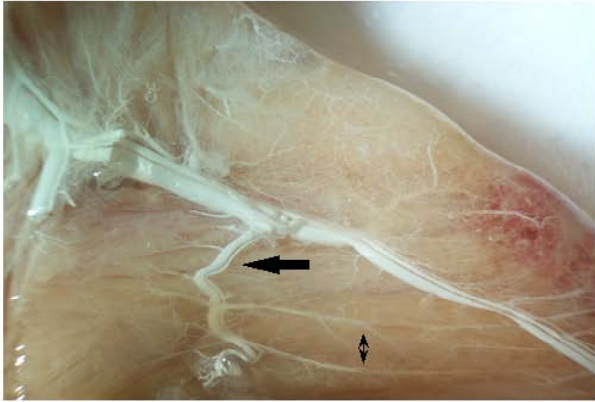


**Fig.S1**



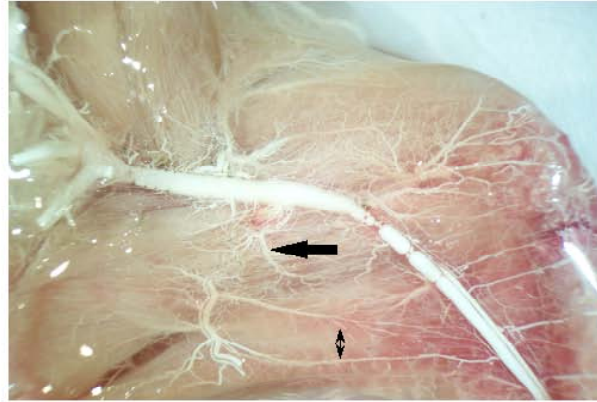
**Fig.S1. Bmx is induced in vascular endothelium.** Bmx and EC marker CD31 in the frozen sections of non-ischemic and ischemic (day 3) lower limb was detected by immunohistochemistry with a anti-Bmx and anti-CD31 antibody, respectively (both are goat IgG). A normal goat IgG was used as a control (Ctrl).

C57BL/6 Non-ischemic

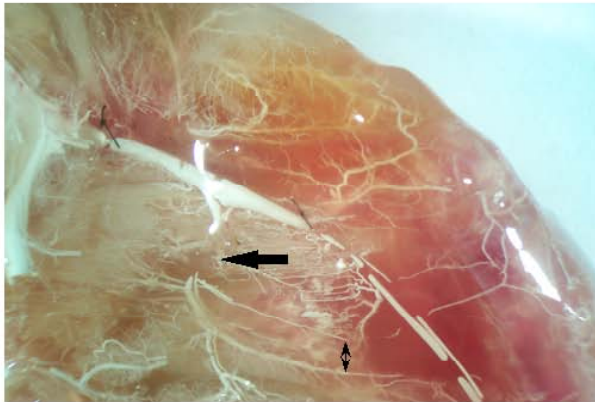


Day 3

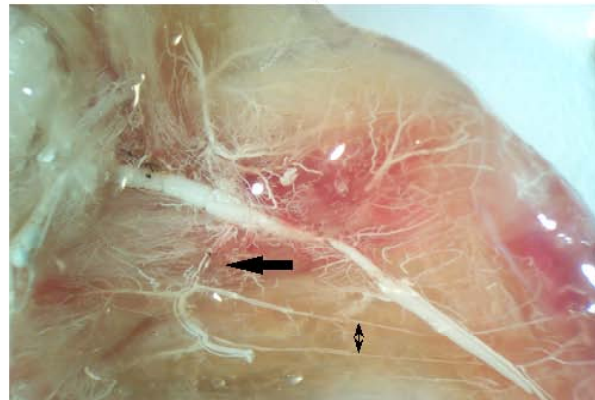
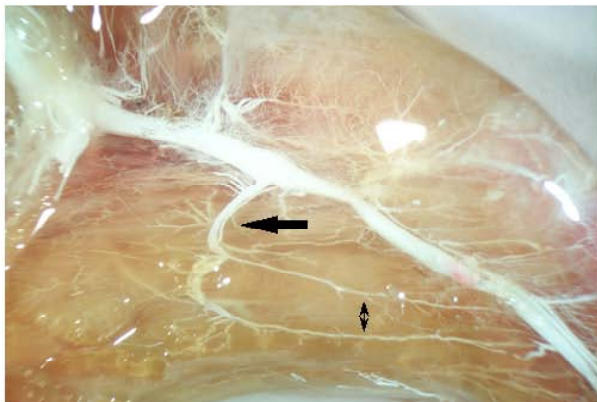
2 wks



4 wks

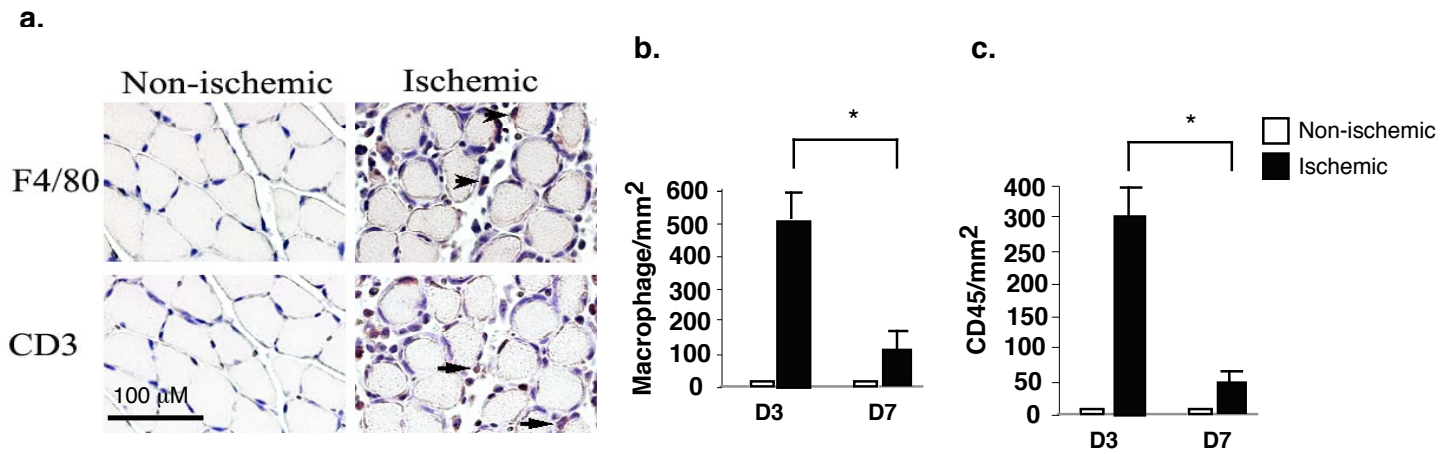


Day 7



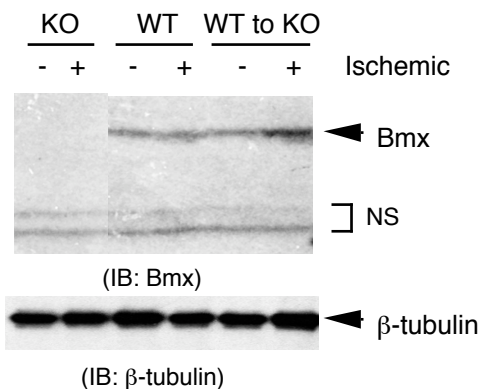
**Fig.S2. Time course for ischemia-induced arteriogenesis.** C57BL/6 mice were subjected to hindlimb ischemia, and mice were anesthetized and subjected to microfil perfusion on day 3, 7, 14 (2 wks) and 28 (4 wks) post-surgery as indicated (n=3 for each time points). Non-ischemic was used as a control. Images for the upper limbs are shown and collateral artery growth is indicated by arrows. Ischemic muscle tissues (red color) are evident on day 3, 7 and 14.

**Fig.S3 C57BL/6**



**Fig.S3. Characterization of infiltrated immune cells in response to ischemia.** C57BL/6 mice were subjected to ischemia ligation, tissues were harvested at indicated times. Recruitment of macrophages and lymphocytes in response to ischemia as determined by anti-F4/80 and anti-CD3 antibody, respectively. Representative images of non- and ischemic hindlimbs in C57BL/6 on day 3 are shown in **a** in which macrophages and lymphocytes are indicated by arrows. F4/80- and CD3-positive cells were counted as number of infiltration/ $\text{mm}^2$  muscle area (**b-c**).

**Fig.S4**



**Fig.S4. Characterization of BMT (WT to Bmx-KO).** Bmx-KO mice were subjected to lethal irradiation followed by BMT by receiving bone marrow cells from WT (WT to KO). Successful BMT was determined by genotyping of Bmx gene six weeks after BMT. The mice were then subjected to femoral artery ligation as

described in the method. 4 wks post-ischemia, bone marrows were harvested and expression of Bmx in bone marrow was determined by Western blot with anti-Bmx antibody. Bone marrows from Bmx-KO and WT mice were used as controls.  $\beta$ -tubulin was used for a protein loading control.