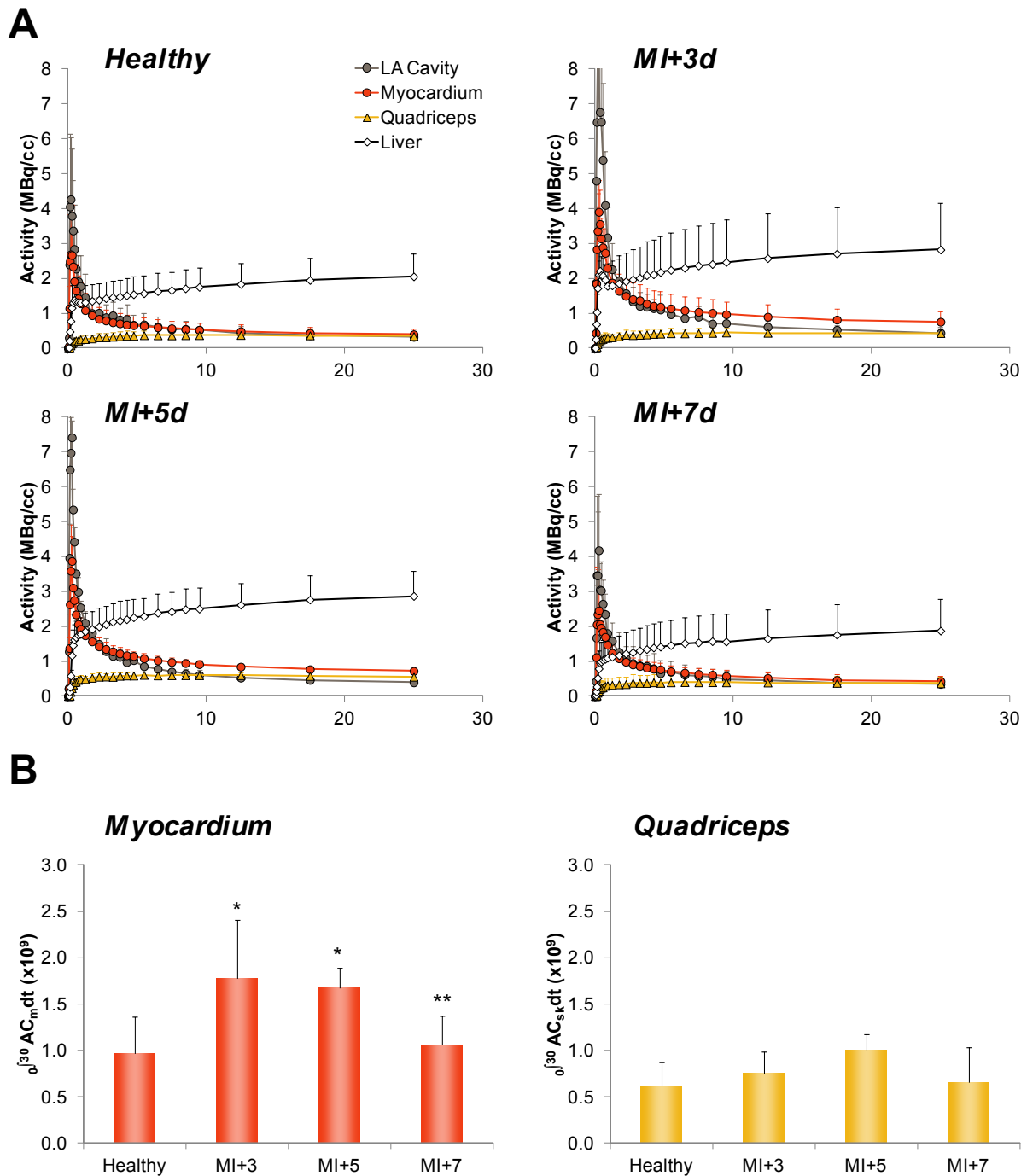
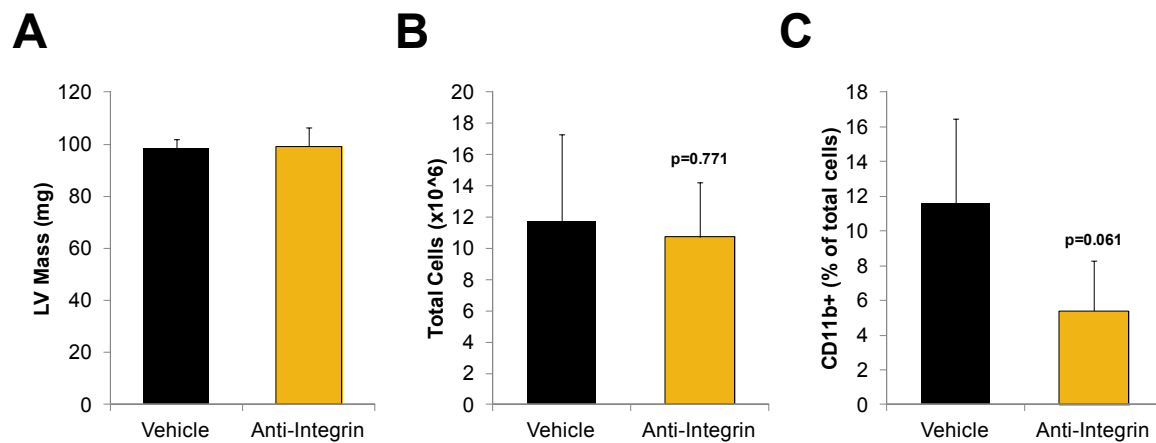


**Figure S1. Timeline of experimental imaging protocol.** Under isoflurane anesthesia, <sup>11</sup>C-methionine is injected and a dynamic 30min PET acquisition is performed. At the conclusion of PET scan, <sup>99m</sup>Tc-sestamibi is injected and a PET coregistration low dose CT is acquired prior to moving to the SPECT-CT camera. A SPECT coregistration low dose CT is then completed, followed by a 7-pinhole SPECT acquisition (30s/view, 52 views) for <sup>99m</sup>Tc-sestamibi, 30 min after tracer injection. **t indicates time (in minutes)**



**Figure S2. Dynamic uptake and retention of <sup>11</sup>C-methionine in myocardium.** **A**, Time-activity curves in myocardium, skeletal muscle (quadriceps femoris) and blood pool in healthy mice and serially after MI. **B**, Area under the curve for myocardium and skeletal muscle indicates higher activity in myocardium in acute stages after MI. \*  $p < 0.05$  to control, \*\*  $p < 0.05$  to control and MI+3d, repeated measure.



**Figures S3. Flow cytometry assessment of left ventricular cells 3d after MI and anti-integrin therapy.** **A**, Left ventricle weight is unaffected by treatment. **B**, Total cells isolated from left ventricle digest is statistically comparable between treated and untreated mice. **C**, CD11b-expressing cells as a percentage of total isolated cells. p values indicated, two tailed t-test.