



**SUPPLEMENTARY FIG. S5.** Seeded stem cells interact with the acellular scaffold and may participate in ECM remodeling. To determine if seeding or culture of rat adipose-derived stem cells lead to degradation or remodeling of the ECM, seeded lung sections were stained for individual ECM components. Staining at the 14 day time point is depicted. Staining was similar to previous staining of decellularized lung scaffolds (Fig. 3), although vitronectin was no longer detectable. Elastin staining was also seen colocalizing with 4',6-diamidino-2-phenylindole (DAPI) staining (white arrows), which may suggest that seeded cells attached to elastin-rich areas or that the cells themselves were producing elastin. Colocalization of ECM staining with DAPI staining (white arrows) and intense staining surrounding DAPI-stained cells (gray arrows) was occasionally observed when detecting collagen, laminin, and smooth muscle actin (SMA). Scale bar indicates 70  $\mu$ m. Inset image is 2 $\times$  from main image.