

**SUPPLEMENTARY FIG. S3.** Representative Masson's Trichrome staining images of explanted tissue from the mouse heterotopic bone growth model for keratin hydrogels or collagen sponges with (+rhBMP-2) or without (-rhBMP-2). Keratin formulations are indicated as KOS:KTN ratio by weight percentage. In this method, nuclei are stained *black*; cytoplasm, muscle fibers, and keratin are stained *red*; collagen and mucus are stained *blue*. KOS, keratose; KTN, kerateine. Scale bars indicate 1 mm.