(a) (b)

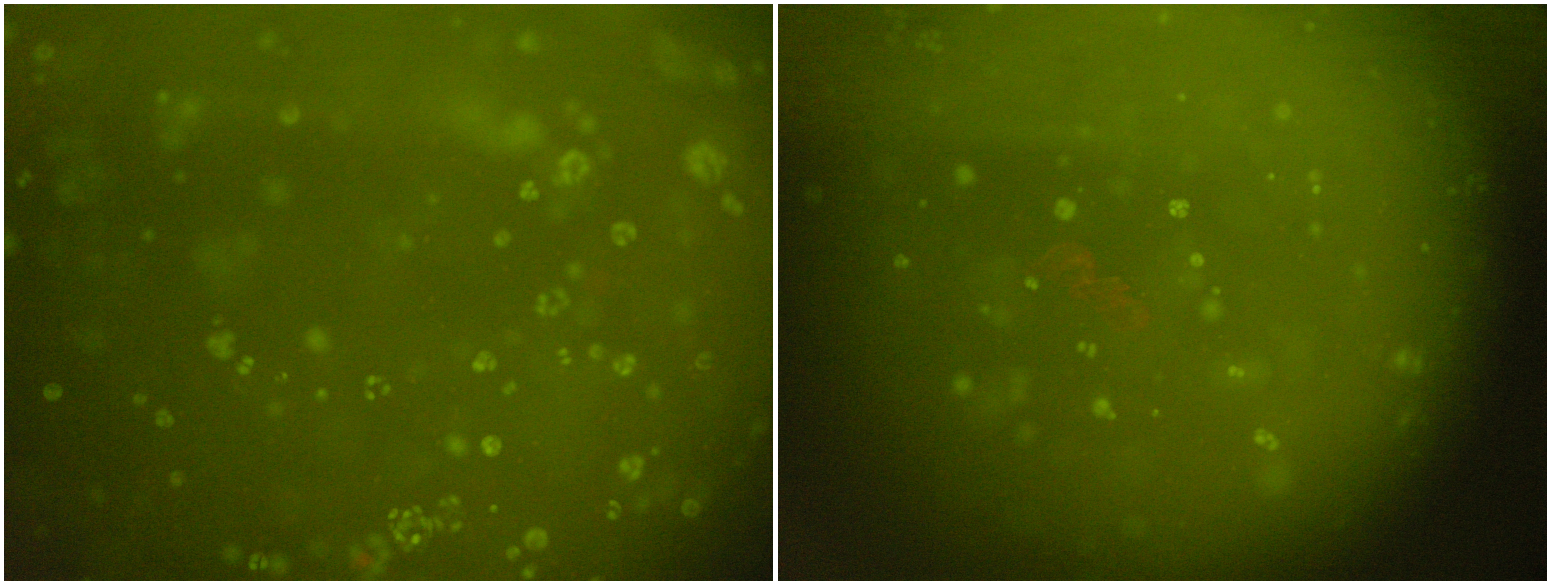


Figure 1. Live/dead assay of cells grown in chondroitin sulfate. Cells were stained using the LIVE/DEAD kit, which contained STYO10 (green) and ethidium homodimer-2 (red), and photographed under a fluorescence microscope at 10x. (a,b) show cells from the core of the bead that were grown in low (0.1 mg/mL) and high (1mg/mL) concentrations of chondroitin sulfate under green fluorescence, respectively.

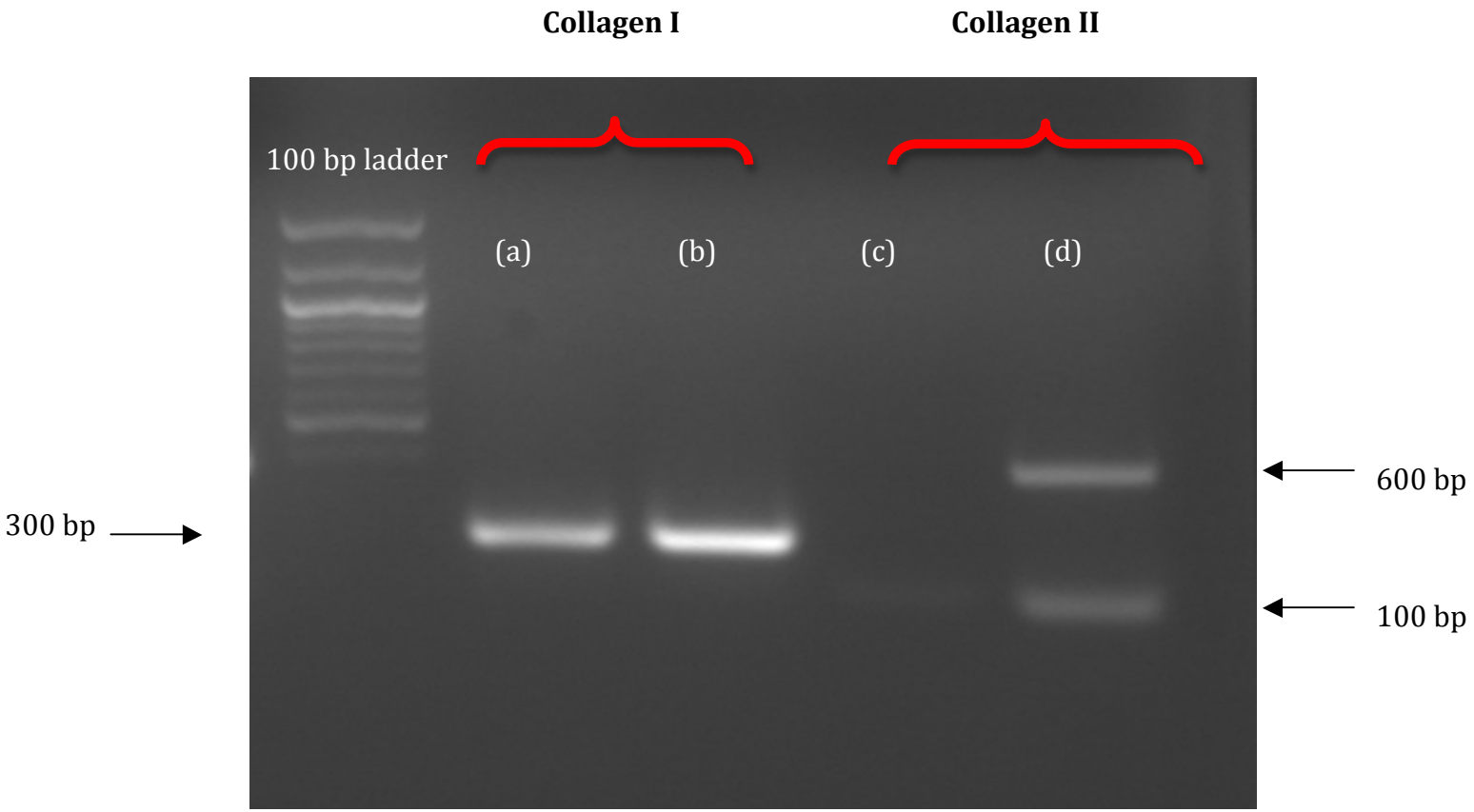
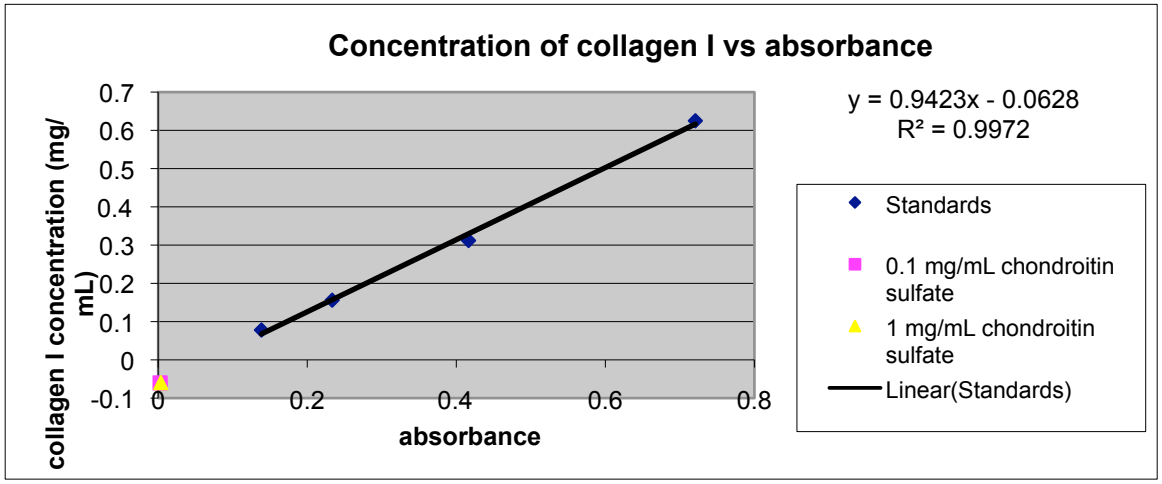


Figure 2. RT-PCR gel of collagen I and II transcripts in cells grown with chondroitin. The RT-PCR products from chondrocytes treated with low (0.1 mg/mL) and high (1mg/mL) concentrations of chondroitin sulfate (CS) were all run on an agarose gel and photographed at 3 second exposure. The lanes contained: (a, b) low and high collagen I; (c, d) low and high collagen II. (a, b, c, d) all contained GAPDH (the lowest band) as well. The expected sizes for CNI, CNII, and GAPDH are ~ 300, 600, and 100 bp, respectively.

(a)



(b)

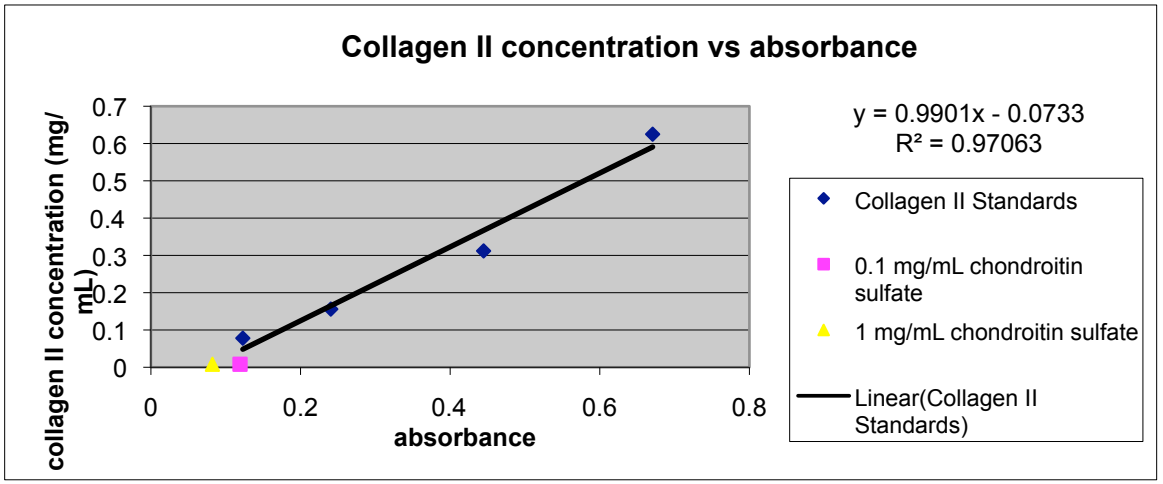


Figure 3. ELISA analysis of collagens I and II concentrations in cells. To calculate protein concentrations using ELISA, 2-fold dilution was performed to create standards ranging from 10 μg/mL to 78 ng/mL of collagen. The absorbance values were subtracted by the background, plotted and fit to a linear regression. We omitted the data points corresponding to 10 ug/mL and 5 ug/mL because they did not fit the linear scheme of the concentration curve. (a, b) represent the curves obtained for collagens I and II, respectively, using low and high concentrations of chondroitin sulfate.