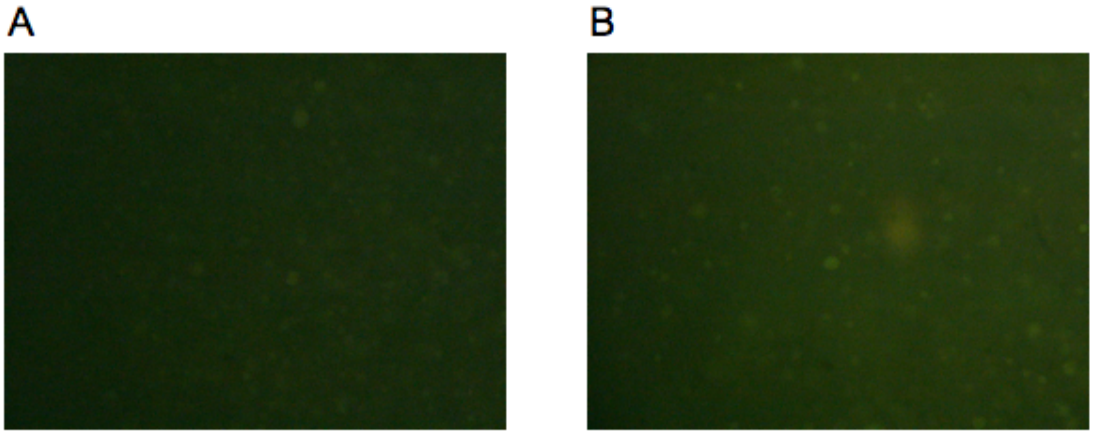
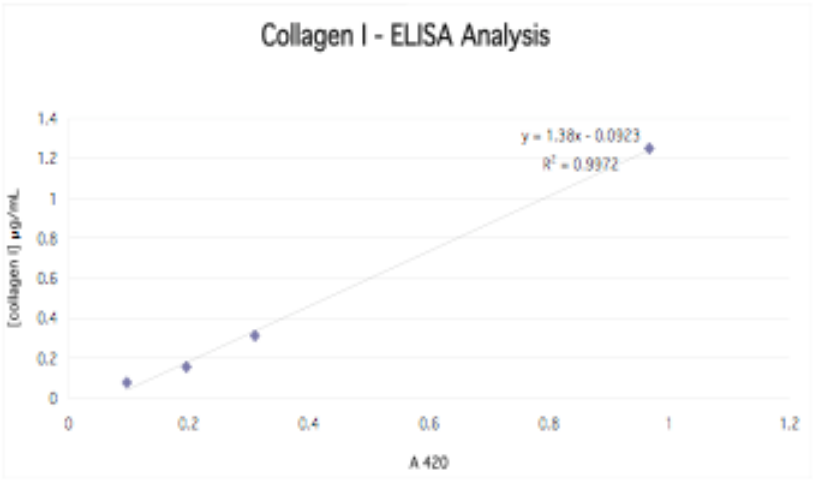


Figure 1. Cell cultures on alginate beads. Using fluorescent microscopy, we visualized the cells from both of our samples in order to determine morphology and viability. (A) These MSCs were treated with media containing 10 ng/mL TGF-β1. Although the images are dim and not well focused, there is a larger, denser cell population in this image. Also, the cells appear healthy and round. (B) These cells were treated with media contained 2 ng/mL of TGF-β1. Although slightly less populus, these cells also appear to be healthy and have normal morphology.

A



B

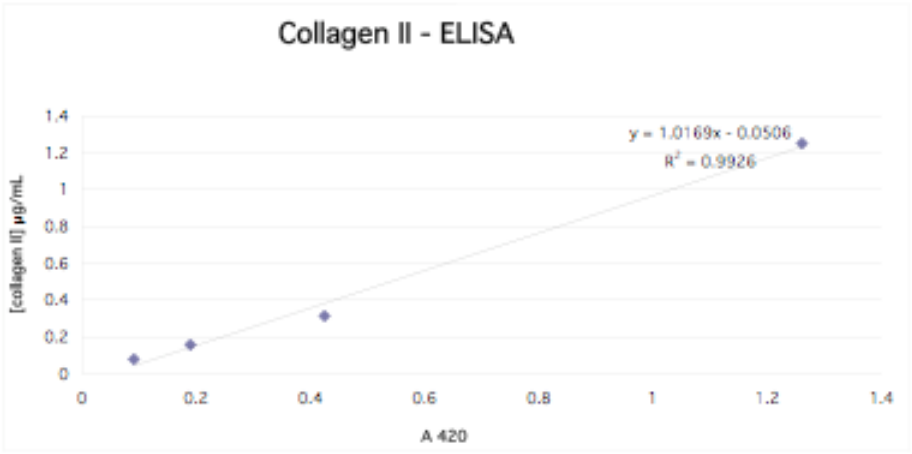


Figure 2. Concentrations of Collagen were determined using standard curves. These charts show the standard curves that were used to calculated the concentrations of (A) Type I Collagen and (B) Type 2 Collagen. These 4 data points were selected because they allowed for the greatest R^2 value, and therefore, the best fit.

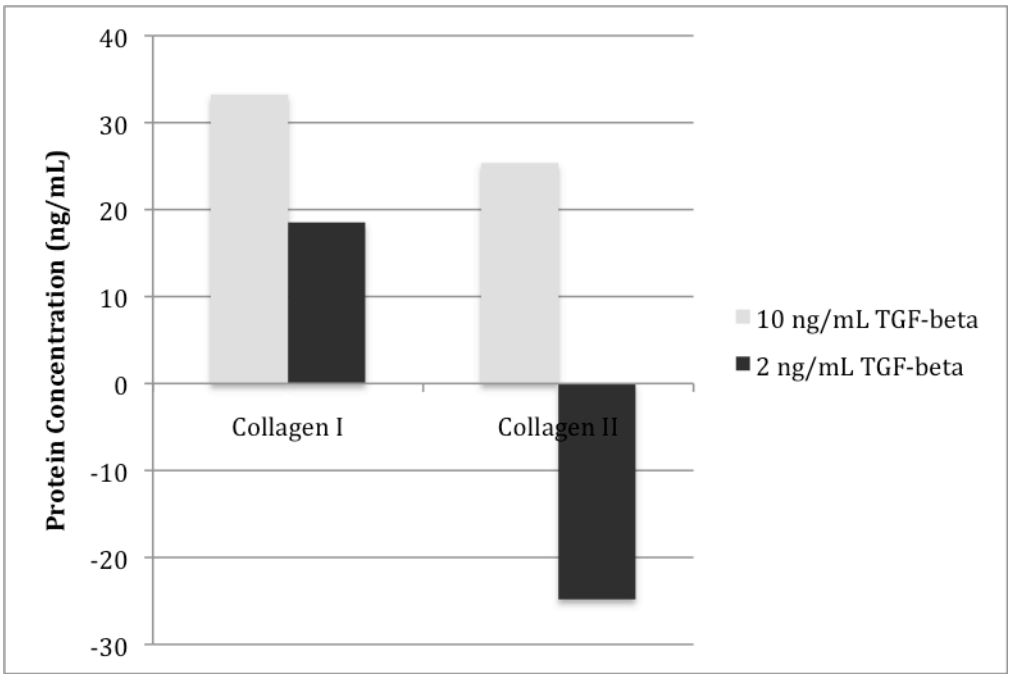


Figure 3 Types I and II Collagen concentrations in cells. The Mesenchymal stem cells were treated with media containing either 10 ng/mL of TGF-β1 or 2 ng/mL of TGF-β1. The concentrations were measured using ELISA and are all very small in both samples. The negative value for the concentration of Type II Collagen in the cells treated with 2 ng/mL could mean that there was no protein present or that it was below a detectable level. Overall, there does not appear to be very much of a difference in the protein concentrations in the samples.

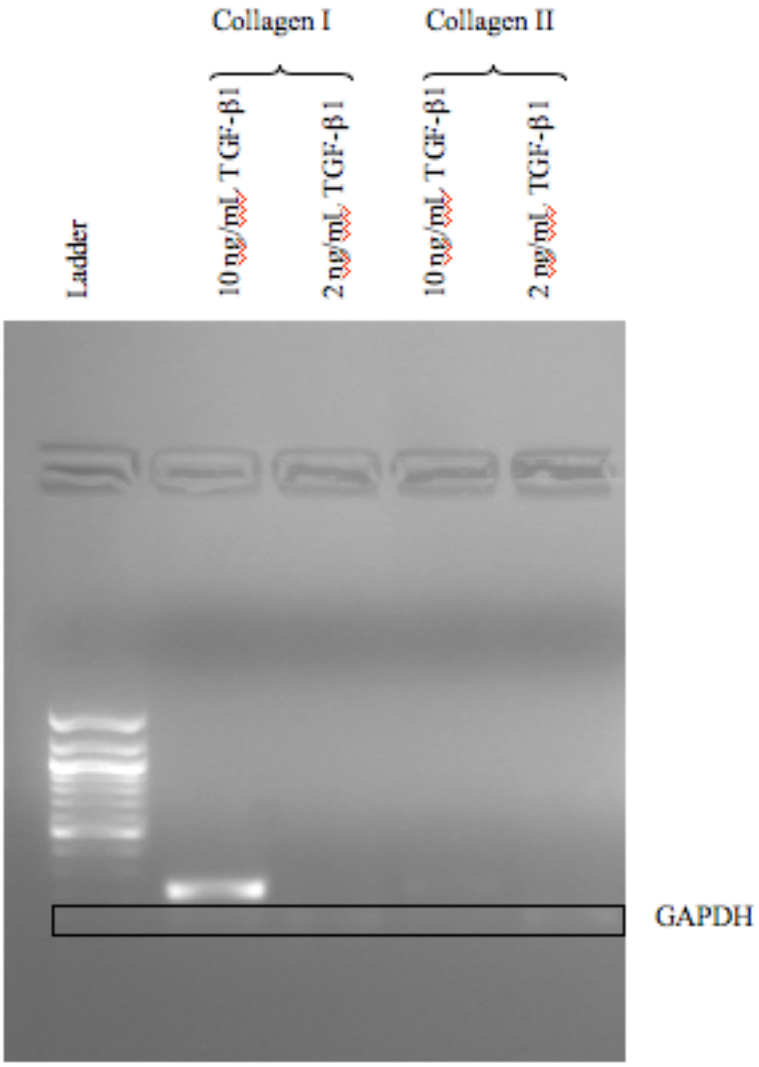


Figure 4 Agarose gel of RT-PCR products. This image was taken with an exposure of .32 seconds. Although the bands in this image are very faint for the most part, it is clearly visible that the 10 ng/mL sample had relatively large amounts of Type I Collagen. In addition to the collagen samples, GAPDH was used as a loading control between the samples. It too has very light bands.