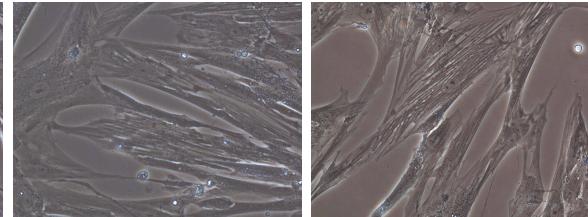
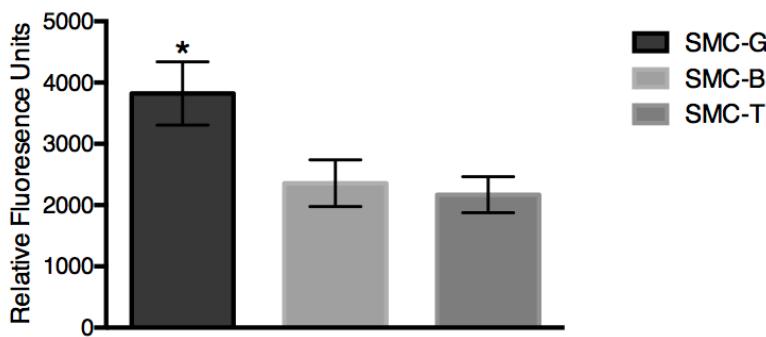


**A)**

SMC-G

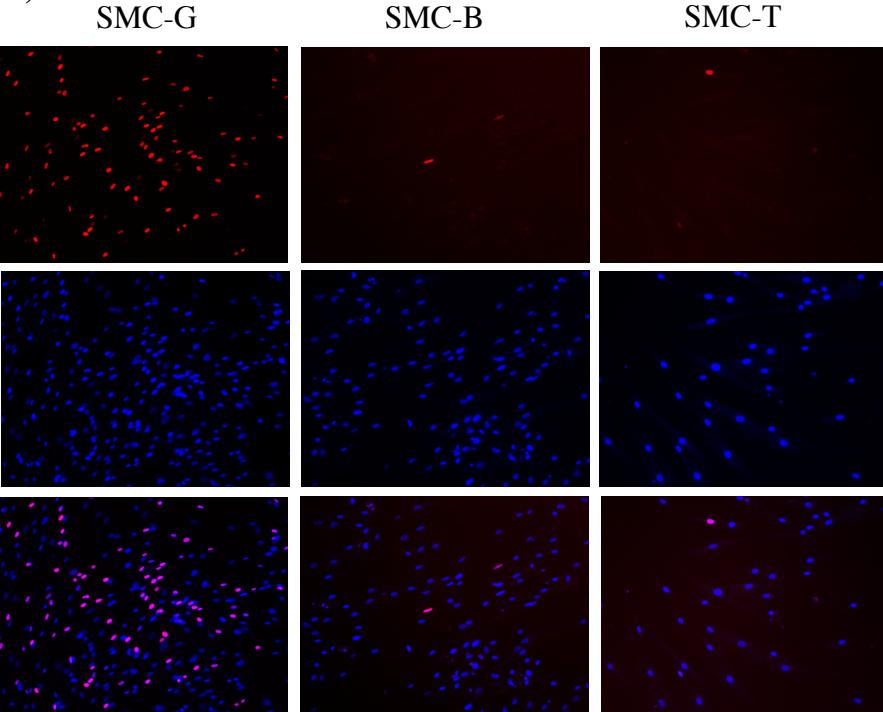
SMC-B

SMC-T

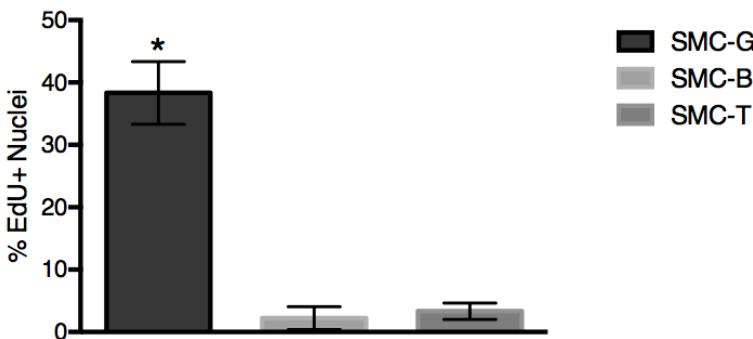
**B)**

**Figure 1.** A) Bright field images of SMC-G, SMC-B, and SMC-T on culture day 4 at 20X magnification.  
B) Analysis of PrestoBlue assay of SMC-G, SMC-B, and SMC-T on culture day 4, \* $p<0.05$  one-way ANOVA

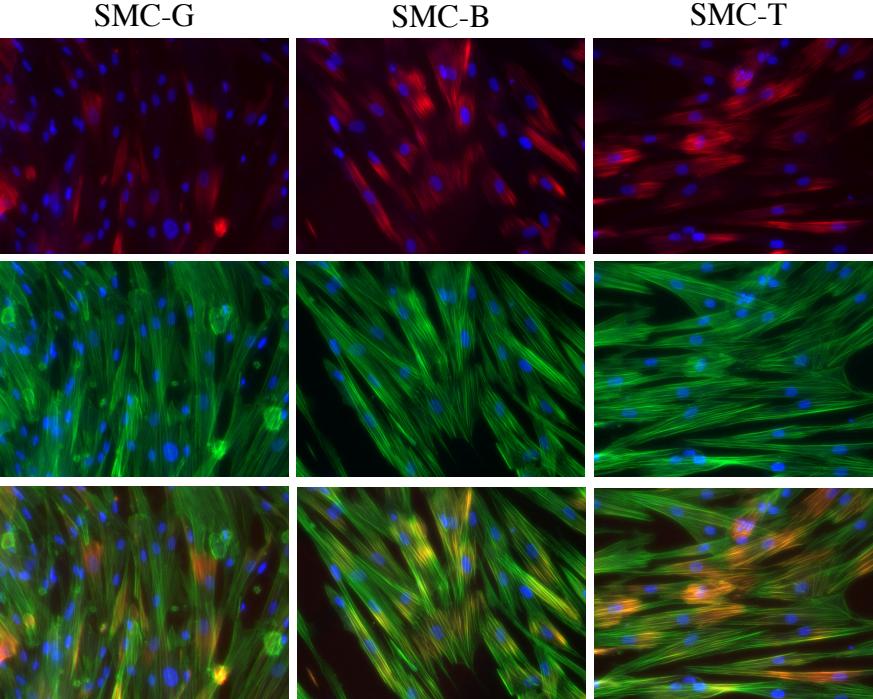
A)



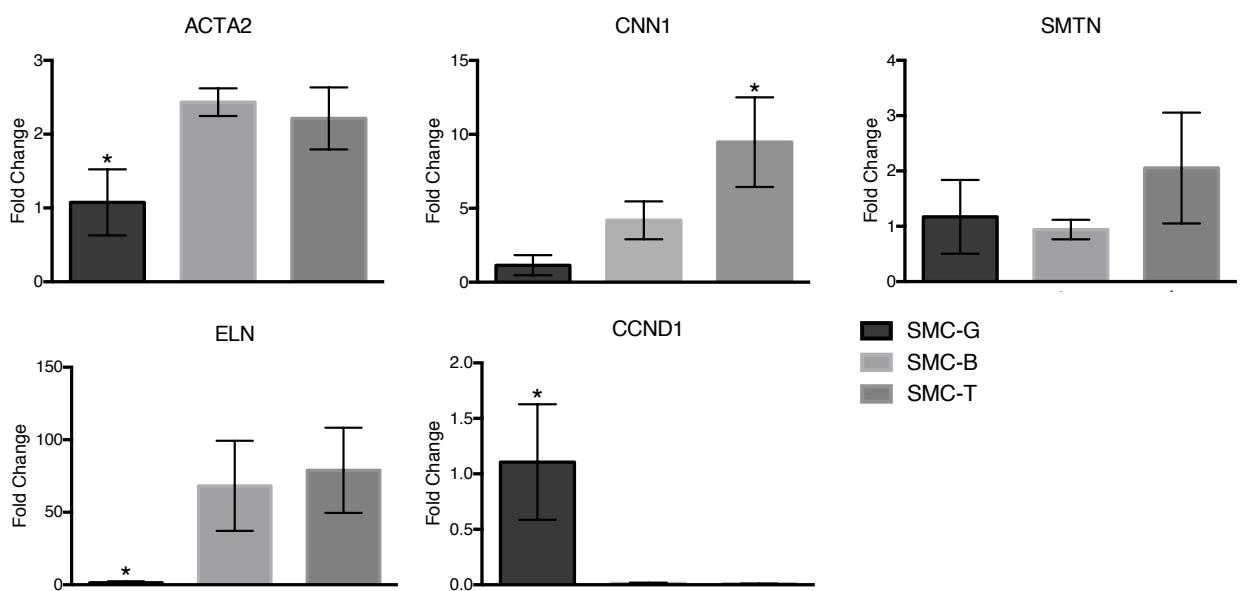
B)



**Figure 2.** EdU assay of SMC-G, SMC-B, and SMC-T on culture day 4. A) Images taken at 10X magnification showing expression of EdU (top), DAPI (middle), and EdU and DAPI merged (bottom). B) Analysis of the percentage of EdU+ nuclei, \*p<0.05 one-way ANOVA



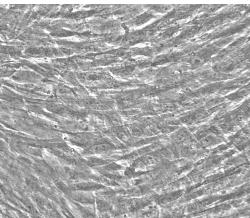
**Figure 3.** Protein expression of SMC-G, SMC-B, and SMC-T on culture day 4. Images taken at 20X magnification showing expression of calponin (red, top), f-actin (green, middle), DAPI (blue, all), and merged (bottom)



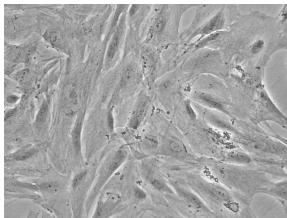
**Figure 4.** qPCR analysis of SMC-G, SMC-B, and SMC-T on culture day 4. Profiles for  $\alpha$  smooth muscle actin (top left), calponin (top middle), smoothelin (top right), elastin (bottom left), cyclin d1 (bottom middle), , \* $p<0.05$  one-way ANOVA

**A)**

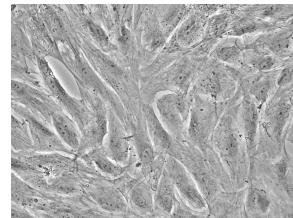
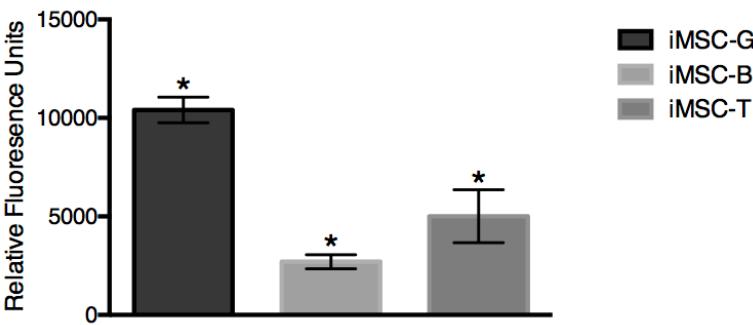
iMSC-G



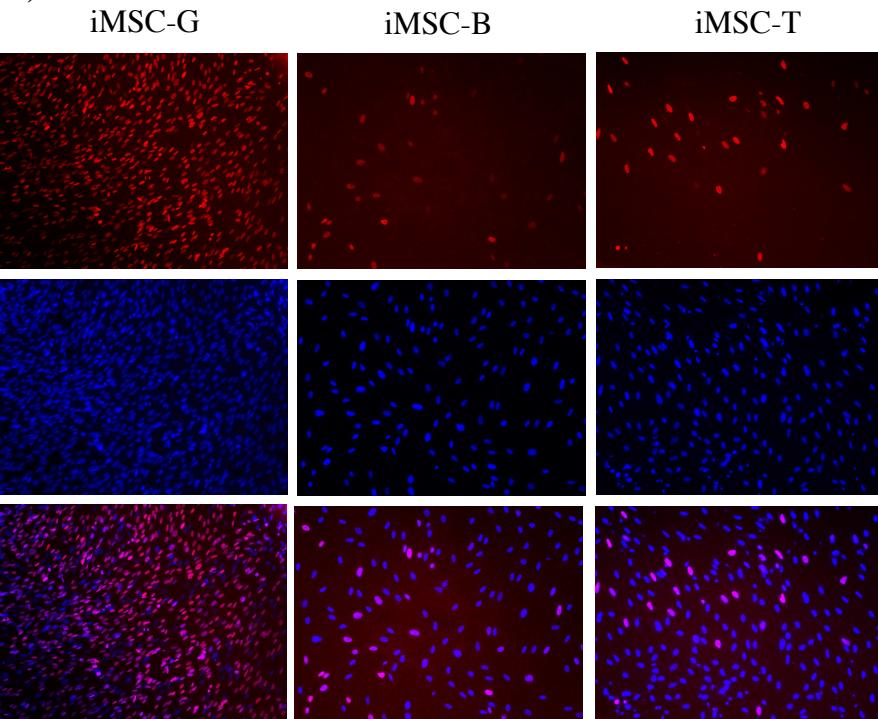
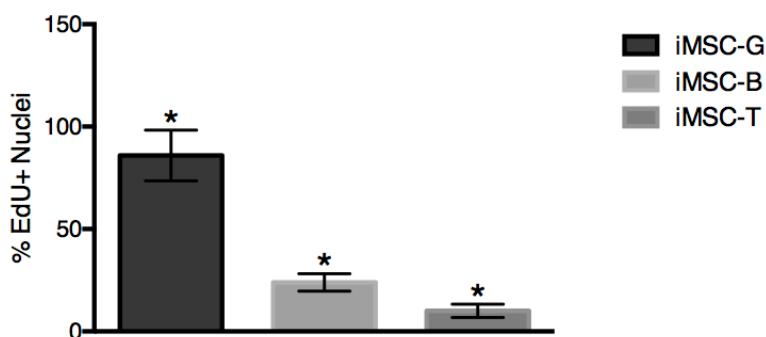
iMSC-B



iMSC-T

**B)**

**Figure 5.** A) Bright field images of iMSC-G, iMSC-B, and iMSC-T on culture day 4 at 20X magnification. B) Analysis of PrestoBlue assay of iMSC-G, iMSC-B, and iMSC-T, \*p<0.05 one-way ANOVA

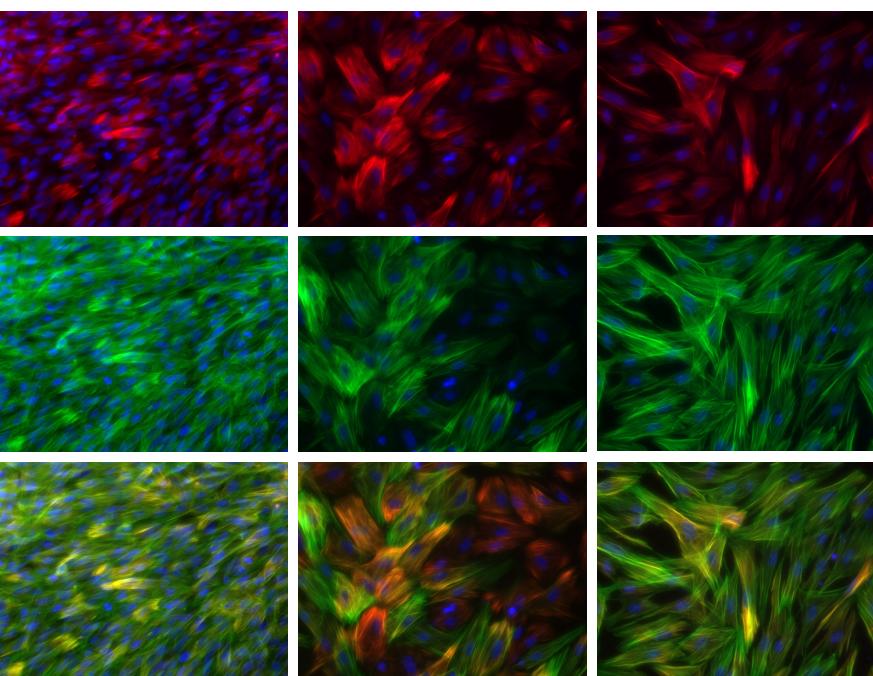
**A)****B)**

**Figure 6.** EdU assay of iMSC-G, iMSC-B, and iMSC-T on culture day 4. A) Images taken at 10X magnification showing expression of EdU (top), DAPI (middle), and EdU and DAPI merged (bottom). B) Analysis of the percentage of EdU+ nuclei, \*p<0.05 one-way ANOVA

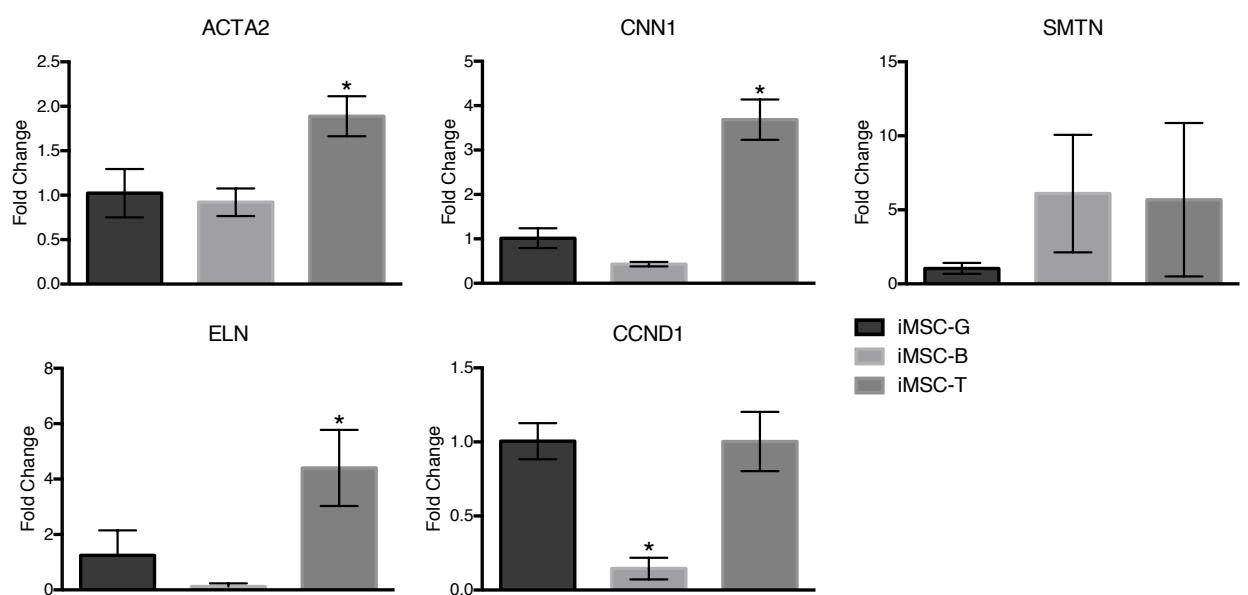
iMSC-G

iMSC-B

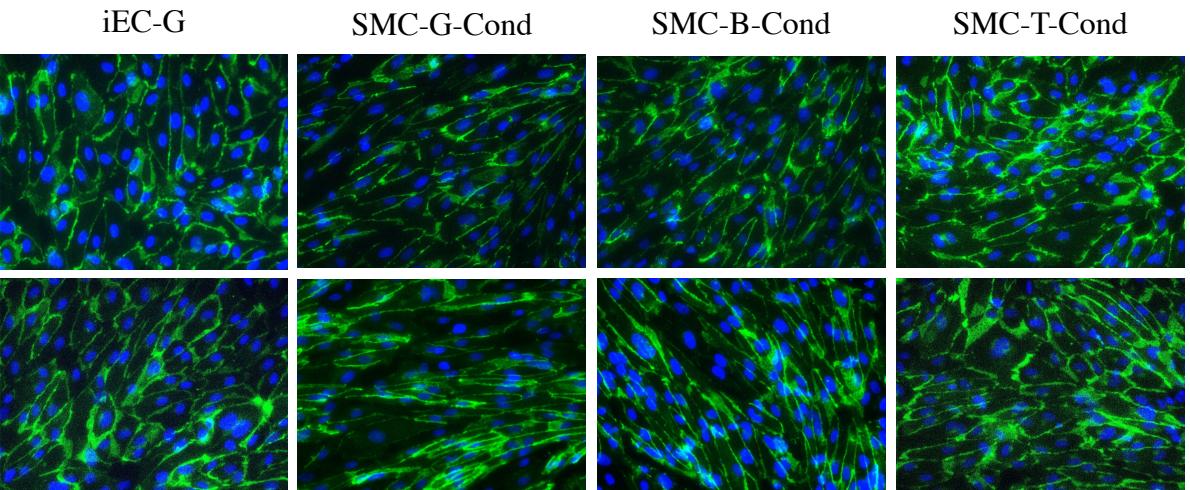
iMSC-T



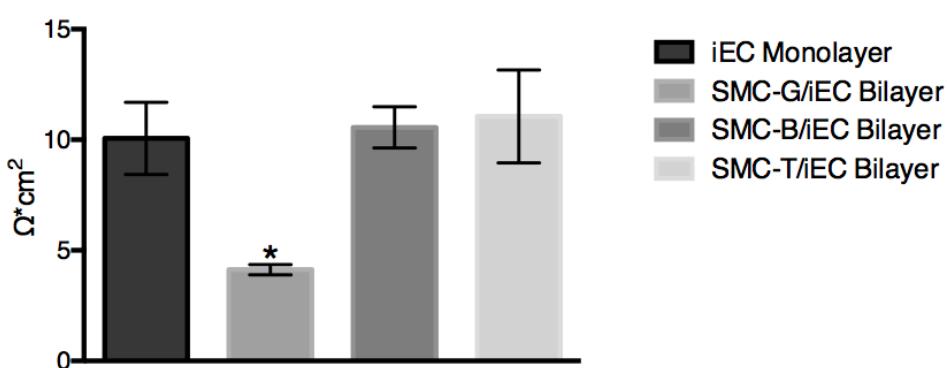
**Figure 7.** Protein expression of SMC-G, SMC-B, and SMC-T on culture day 4. Images taken at 20X magnification showing expression of calponin (red, top), f-actin (green, middle), DAPI (blue, all), and merged (bottom)



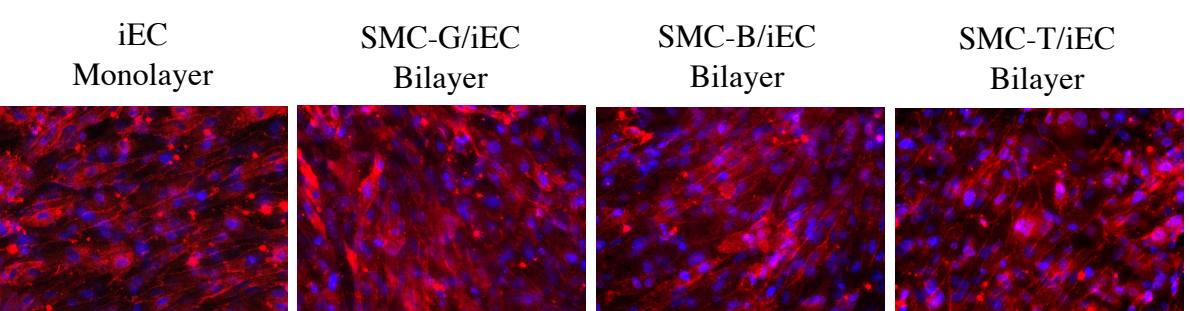
**Figure 8.** qPCR analysis of SMC-G, SMC-B, and SMC-T on culture day 4. Profiles for  $\alpha$  smooth muscle actin (top left), calponin (top middle), smoothelin (top right), elastin (bottom left), cyclin d1 (bottom middle), \* $p<0.05$  one-way ANOVA



**Figure 9.** Protein expression of iEC-G, SMC-G-Cond, SMC-B-Cond, and SMC-T-Cond on culture day 3 (top) and culture day 6 (bottom). Images taken at 20X magnification showing expression of VE-cadherin (green) and DAPI (blue).



**Figure 10.** Analysis of TEER readings of iEC Monolayer, SMC-G/iEC Monolayer, SMC-B/iEC Monolayer, and SMC-T/iEC Monolayer on culture day 6,\*p<0.05 one-way ANOVA

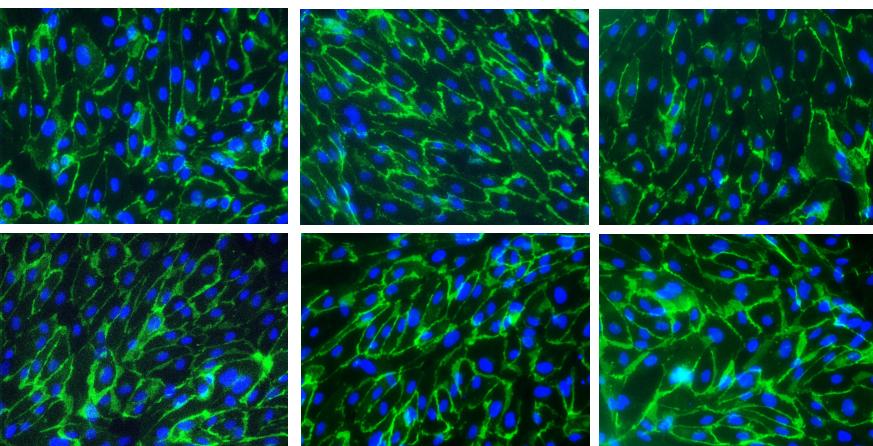


**Figure 11.** Protein expression of iEC Monolayer, SMC-G/iEC Monolayer, SMC-B/iEC Monolayer, and SMC-T/iEC Monolayer on culture day 13. Images taken at 20X magnification showing expression of ZO-1 (red) and DAPI (blue).

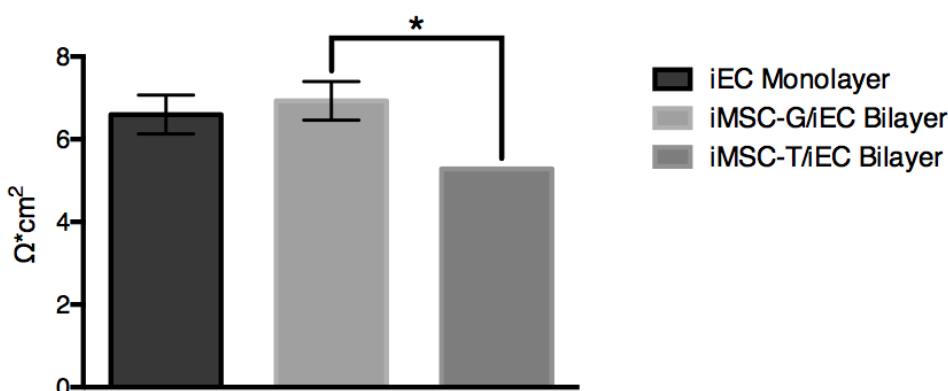
iEC-G

iMSC-G-Cond

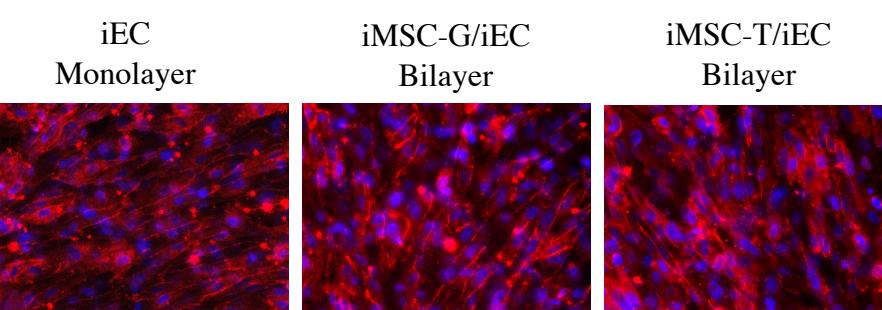
iMSC-T-Cond



**Figure 12.** Protein expression of iEC-G, iMSC-G-Cond, iMSC-B-Cond, and iMSC-T-Cond on culture day 3 (top) and culture day 6 (bottom). Images taken at 20X magnification showing expression of VE-cadherin (green) and DAPI (blue).



**Figure 13.** Analysis of TEER readings of iEC Monolayer, iMSC-G/iEC Monolayer, iMSC-B/iEC Monolayer, and iMSC-T/iEC Monolayer on culture day 6, \*p<0.05 one-way ANOVA



**Figure 14.** Protein expression of iEC Monolayer, iMSC-G/iEC Monolayer, iMSC-B/iEC Monolayer, and iMSC-T/iEC Monolayer on culture day 13. Images taken at 20X magnification showing expression of ZO-1 (red) and DAPI (blue)