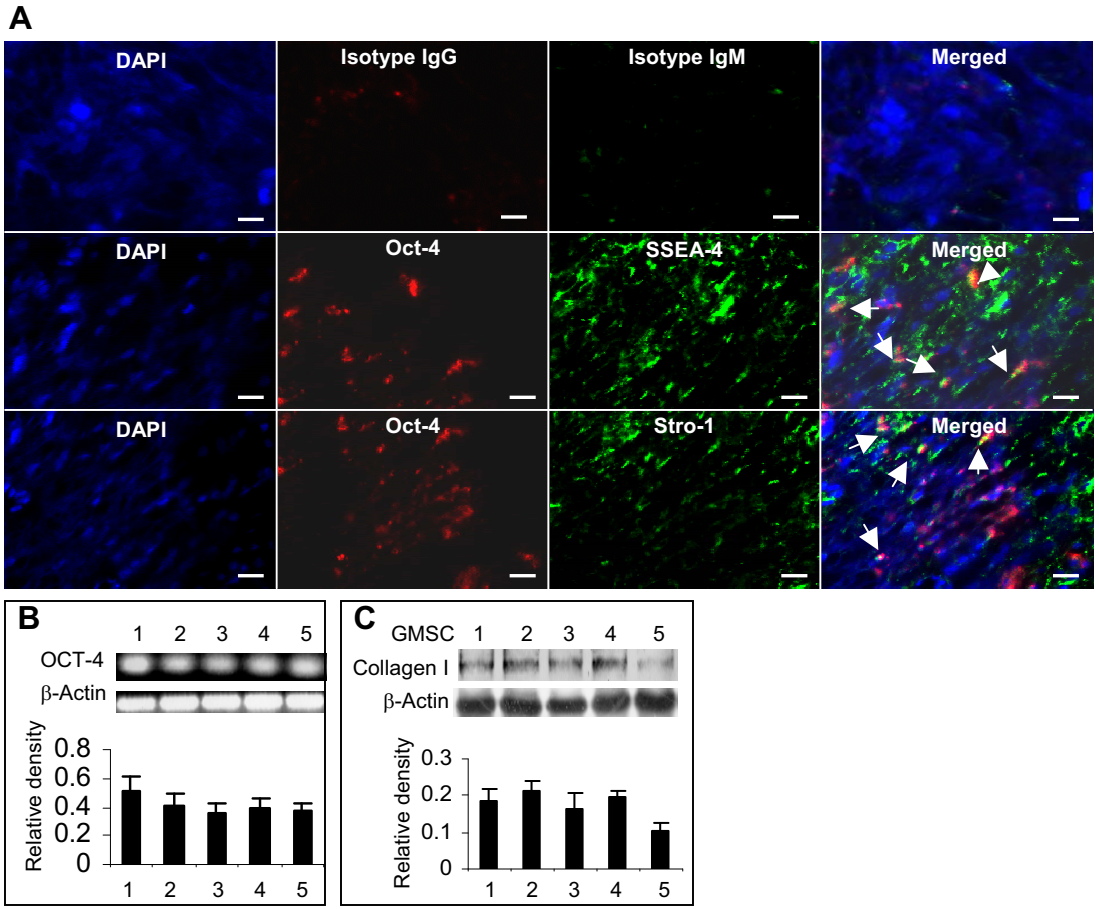

Figure S1. Expression of stem cell markers in human gingival tissues. *A*, Frozen sections of gingival tissues were immunostained with mouse monoclonal antibodies specific for human Oct-4/SSEA-4 or Stro-1, or an isotype-matched control IgG or IgM. After washing, sections were incubated with rhodamine- or FITC-conjugated secondary antibodies, and images were observed under a fluorescence microscope. Scale bar: 100μm. *B*, Expression of Oct-4 mRNA in human gingival tissues as determined by semi-quantitative RT-PCR.1-5 represent gingival RNA samples from 5 different donors. *C*, Expression of type I collagen in cultured GMSCs at passage 4 as determined by Western blot analysis. 1-5 represent GMSCs derived from 5 different donors.

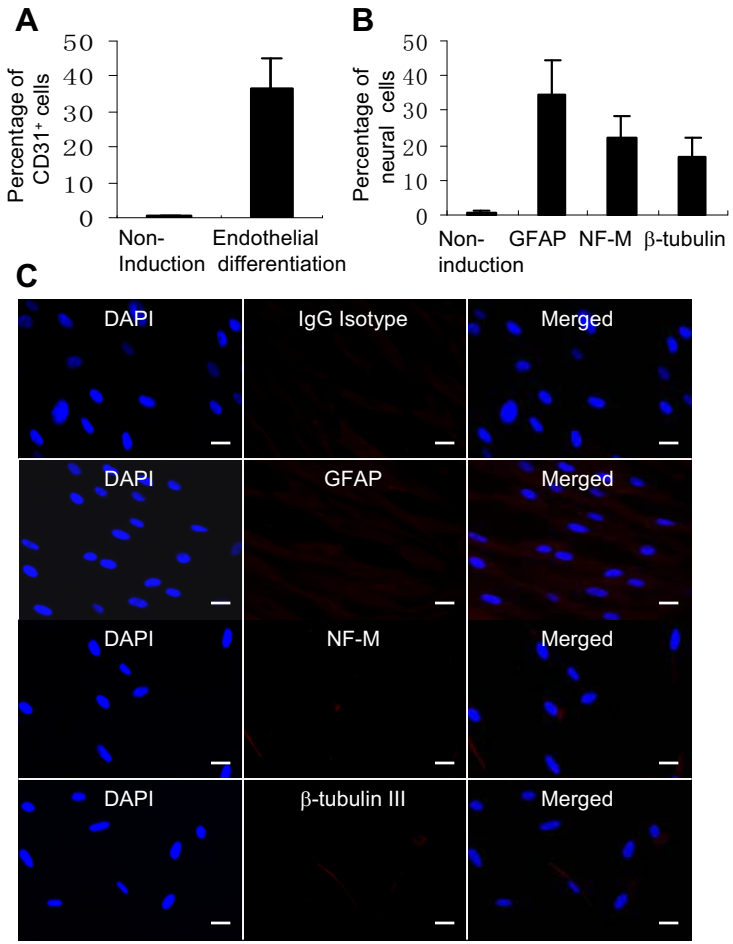

Figure S2. Endothelial and neural differentiation of GMSCs. *A*, quantification of cells positive for endothelial cell marker, CD31, in GMSCs after cultured in endothelial cell culture condition for 7 days. At least 5 random high-power fields were counted and expressed as the percentage of the total DAPI-positive cells (mean ± SD). *B,* quantification of cells positive for different neural cell markers, including GFAP, NF-M and β-tubulin III, in GMSCs after cultured in neural cell culture condition for 14 days. At least 5 random high-power fields were counted and expressed as the percentage of the total DAPI-positive cells (mean ± SD). *C*, GMSCs were cultured in non-induction medium for 14 days and then immunostained with primary antibodies for GFAP, NF-M and β-tubulin III, followed by incubation with rhodamine-conjugated secondary antibodies, and observed under a fluorescence microscope. An isotype-matched IgG was used as control. Scale bar: 100μm. The results were representative of at least three independent experiments.