Supplementary Materials

1. Supplementary Tables

Table S1. Cell surface marker panel for FE002 primary progenitor tenocytes following in vitro monolayer expansion in various incubation atmospheres. CD, cluster of differentiation; FITC, fluorescein isothiocyanate; HLA; human leucocyte antigen; PE, phycoerythrin. Adapted from [28].

Cell Surface Marker	Antibody Used for Characterization	Surface Marker Expression in Normoxic [1] Monolayer Culture	Surface Marker Expression in Hypoxic [2] Monolayer Culture
CD14	FITC Mouse Anti-Human CD14	-	-
CD19	PE Mouse Anti-Human CD19	-	-
CD26	PE Mouse Anti-Human CD26	+	+
CD34	PE Mouse Anti-Human CD34	-	-
CD44	PE Mouse Anti-Human CD44	+	+
CD45	FITC Mouse Anti-Human CD45	-	-
CD73	PE Mouse Anti-Human CD73	+	+
CD90	PE Mouse Anti-Human CD90	+	+
CD105	PE Mouse Anti-Human CD105	+	+
CD166	PE Mouse Anti-Human CD166	+	+
HLA-ABC	PE Mouse Anti-Human HLA-ABC	+	+
HLA-DPQR	FITC Mouse Anti-Human HLA-DR,-DP,-DQ	-	-

[1] Normoxic culture conditions consisted in an incubation atmosphere composed of 5% CO_2 and 21% O_2. [2] Hypoxic culture conditions consisted in an incubation atmosphere composed of 5% CO_2 and 2% O_2.

Table S2. Experimental assessment of the differentiation potential of FE002 primary progenitor tenocytes in vitro under chemical induction during adherent cell culture. Adipose-derived stem cells were used as experimental positive controls in the differentiation assays. DMEM, Dulbecco's Modified Eagle Medium; FBS, fetal bovine serum; HPL, human platelet lysate; ITS, insulin-transferrin-selenium. Adapted from [28].

Differentiation Assay Type	Chemical Induction Medium	Readout	Differentiation Result in Normoxic [1] Culture	Differentiation Result in Hypoxic [2] Culture
Adipogenic Culture	High-glucose DMEM; 10% *v/v* FBS; 2 mM L-glutamine; ITS 1×; 1 μM dexamethasone; 100 μM indomethacin; 100 μM IBMX	Oil Red O stain	-	-
Osteogenic Culture	High-glucose DMEM; 5% *v/v* HPL; 80 μg/mL VitCp; 5 mM β-glycerophosphate; 100 nM dexamethasone	Alizarin Red stain	-	-
		Von Kossa stain	-	-

[1] Normoxic culture conditions consisted in an incubation atmosphere composed of 5% CO_2 and 21% O_2. [2] Hypoxic culture conditions consisted in an incubation atmosphere composed of 5% CO_2 and 2% O_2.

2. Supplementary Figures

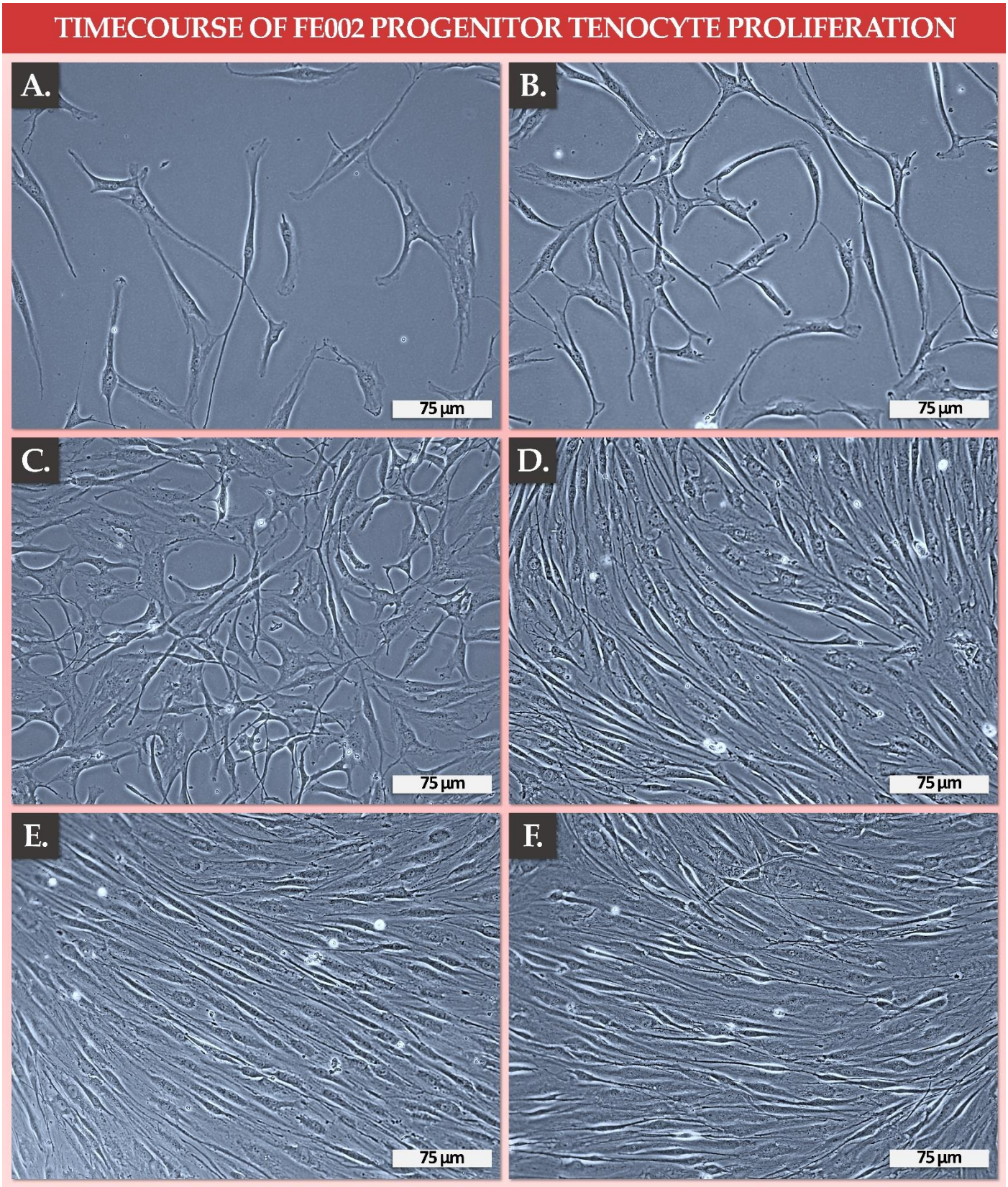

Figure S1. Illustrative timecourse of human primary progenitor tenocyte (e.g., FE002-Ten cells, passage level 6) in vitro expansion. Photographs were taken in microscopy at the time of culture medium exchange. Proliferating cells after 2 days of culture (**A**), after 5 days of culture (**B**), after 7 days of culture (**C**), after 9 days of culture (**D**), after 12 days of culture (**E**), and after 14 days of culture (**F**). Scale bars = 75 µm.