

ESM Table 3

Table 3. Gene expression of SMC and EC lineage genes in cultured SMCs.

Gene name	Type 2 diabetes without MVD	Type 2 diabetes with PAD	Type 2 diabetes with CAD	Healthy control	Non-type 2 diabetes with PAD	Non-Type 2 diabetes with CAD	p-value
SMC							
<i>ACTA2</i>	1.0 ± 0.1 ^a	0.9 ± 0.2	0.4 ± 0.1 Δ	1.0 ± 0.2 Δ	0.6 ± 0.1	0.9 ± 0.3	<0.05
<i>MYH11</i>	2.7 ± 1.0	0.8 ± 0.2	0.7 ± 0.2 Δ	1.0 ± 0.5 Δ	0.6 ± 0.2 Δ	1.3 ± 0.4 Δ	NS
<i>SMT</i>	1.5 ± 0.3	1.0 ± 0.1	1.2 ± 0.3	1.0 ± 0.2 Δ	1.4 ± 0.3	0.9 ± 0.2	NS
<i>SRF</i>	1.2 ± 0.2	1.0 ± 0.01 Δ	1.2 ± 0.1 Δ	1.0 ± 0.3	1.3 ± 0.7	1.3 ± 0.2	NS
<i>KLF4</i>	0.8 ± 0.1	0.6 ± 0.1	0.7 ± 0.1 Δ	1.0 ± 0.2	0.5 ± 0.1 Δ	1.0 ± 0.2	NS
<i>SMAD4</i>	1.0 ± 0.1	0.8 ± 0.1	0.9 ± 0.02 Δ	1.0 ± 0.2 Δ	0.8 ± 0.05 Δ	0.8 ± 0.03	NS
<i>TGFB1</i>	0.8 ± 0.1	0.9 ± 0.1	1.1 ± 0.1	1.0 ± 0.2 Δ	0.8 ± 0.1 Δ	0.8 ± 0.1	NS
<i>TGFB1</i>	0.6 ± 0.1	0.6 ± 0.05 Δ ^b	0.9 ± 0.1 Δ	1.0 ± 0.2 Δ	0.9 ± 0.2	1.0 ± 0.2	<0.05
<i>TGFB2</i>	0.5 ± 0.1 ^c	0.6 ± 0.03	0.8 ± 0.03 Δ ^d	1.0 ± 0.2	0.8 ± 0.1	0.6 ± 0.1	<0.05
<i>BMP6</i>	1.0 ± 0.3 Δ	1.9 ± 0.4 ^e	0.7 ± 0.8	1.0 ± 0.2 Δ ^f	1.0 ± 0.2	0.4 ± 0.1 Δ	<0.05
<i>PDGFBB</i>	0.6 ± 0.1 Δ	1.2 ± 0.3	1.2 ± 0.2 Δ	1.0 ± 0.2 Δ	1.5 ± 0.3 ^g	0.8 ± 0.1	<0.05
<i>COL1A1</i>	0.5 ± 0.2	0.3 ± 0.1 Δ	0.9 ± 0.3	1.0 ± 0.3	0.4 ± 0.2	0.8 ± 0.3	NS
EC							
<i>KDR</i>	0.3 ± 0.1 ^h	1.5 ± 0.4	0.8 ± 0.2	1.0 ± 0.4	1.4 ± 0.5	1.1 ± 0.5	<0.05
<i>VEGFA</i>	1.2 ± 0.2 ⁱ	0.7 ± 0.1	1.0 ± 0.1	1.0 ± 0.2 Δ	0.8 ± 0.2	1.4 ± 0.3	<0.05
<i>NOS3</i>	0.5 ± 0.1 ^j	0.3 ± 0.05	0.5 ± 0.1 Δ	1.0 ± 0.1 Δ	0.7 ± 0.3	0.7 ± 0.2	<0.05
<i>PECAMI</i>	0.5 ± 0.1 Δ ^k	0.8 ± 0.1 ^l	1.0 ± 0.04 Δ ^m	1.0 ± 0.2 Δ	0.8 ± 0.2	1.0 ± 0.2	<0.05

Data are expressed as relative mRNA expression +/- SEM compared to the healthy control group. N=6 per group unless indicated by Δ (N=5). *ACTA2*, α-Smooth muscle actin; *MYH11*, Smooth muscle myosin heavy chain; *SMT*, Smoothelin, *SRF*, Serum response factor; *KLF4*, Krüppel-like factor 4; *SMAD4*, Mothers against decapentaplegic homolog 4; *TGFB1*, Transforming growth factor-β; *TGFB1*, Transforming growth factor-β receptor 1; *TGFB2*, Transforming growth factor-β receptor 2; *BMP6*, Bone-morphogenetic protein 6; *PDGFBB*, Platelet-derived growth factor-bb; *COL1A1*; Collagen type 1, α1; *KDR*, Kinase domain receptor; *VEGFA*, Vascular endothelial growth factor A; *NOS3*, Endothelial nitric oxide synthase; *PECAMI*; Platelet endothelial cell adhesion molecule 1

Statistically significant with ANOVA compared to:

^aT2DM no MVD vs. T2DM with CAD

^bT2DM with PAD vs. T2DM with CAD

^cT2DM no MVD vs. Healthy control

^dT2DM no MVD vs. T2DM with CAD

^eT2DM with PAD vs. T2DM with CAD

^fHealthy control vs. non-T2DM with CAD

^gnon-T2DM with PAD vs. non-T2DM with CAD

^hT2DM no MVD vs. T2DM with PAD

ⁱT2DM no MVD vs. T2DM with PAD

^jT2DM no MVD vs. Healthy control

^kT2DM no MVD vs. Healthy control

^lT2DM no MVD vs. T2DM with CAD

^mT2DM with CAD vs. T2DM with PAD