

ESM Table 1 Antibodies used for flow cytometry

Antigen	Fluorophore	Supplier	Cat#	Dilution
CD105	FITC	Thermo Scientific	MA1-19594	1/25
CD14	APC	BioLegend	301808	1/30
CD146	PE-Cy7	BD Biosciences	562135	1/10
CD16	PerCP	BioLegend	302030	1/20
CD184	APC	BD Biosciences	555976	1/10
CD31	PE	BD Biosciences	560983	1/10
CD34	FITC	Miltenyi	130-081-001	1/20
CD44	PE	BD Biosciences	550989	1/10
CD45	APC-H7	BD Biosciences	560178	1/10
CD73	PE-Cy7	BD Biosciences	344010	1/10
CD90	PE	BD Biosciences	555596	1/10

ESM Table 2 List of antibodies used for western blot analyses

Protein target	Supplier	Catalogue number
p-AKT (Ser473)	Cell Signalling Technology	9271
p-AKT (Thr308)	Cell Signalling Technology	9275
AKT	Cell Signalling Technology	9272
β -Tubulin	Cell Signalling Technology	86298
β -Actin	Sigma-Aldrich	A5441 (AC15)

ESM Table 3 List of antibodies used for immunohistochemistry (IHC) and immunocytochemistry (ICC)

Antigen	Application	Isotype	Clone	Concentration	Brand	Code	Secondary Ab (Alexa Fluor)
Human MCAM	IHC	Mouse IgG	1/MCAM	1/50	BD Transduction Laboratories	611208	Mouse dev. Goat 568
Von Willebrand Factor	IHC	Rabbit IgG	polyclonal	1/30	Abcam	ab9378	Rabbit dev. Goat 488
CD146	IHC, ICC	Rabbit IgG	EPR3208	1/50	Abcam	ab75769	Rabbit dev. Goat 568
PGP9.5	IHC	Mouse IgG	PGP9.5	1/100	Abcam	ab72911	Mouse dev. Goat 488
Human Actin (Smooth Muscle)	IHC	Mouse IgG	1A4	1/100	Agilent DAKO	GA611	Mouse dev. Goat 488
Nestin	IHC, ICC	Mouse IgG	GT623	1/50	Abcam	ab184543	Mouse dev. Donkey 467
SDF1/CXCL12	IHC, ICC	Rabbit IgG	polyclonal	1/100	Cell Signaling	3740S	Rabbit dev. Donkey 568
VE Cadherin	ICC	Rabbit IgG	polyclonal	1/50	Abcam	ab33168	Rabbit dev. Donkey 568
PDGF Receptor β	ICC	Rabbit IgG	28E1	1/50	Cell Signaling	3169S	Rabbit dev. Donkey 568
NG2	ICC	Rabbit IgG	HMB45	1/50	Abcam	ab83508	Rabbit dev. Goat 488
VEGFR2	ICC	Rabbit IgG	polyclonal	1/50	Abcam	ab9530	Rabbit dev. Goat 488

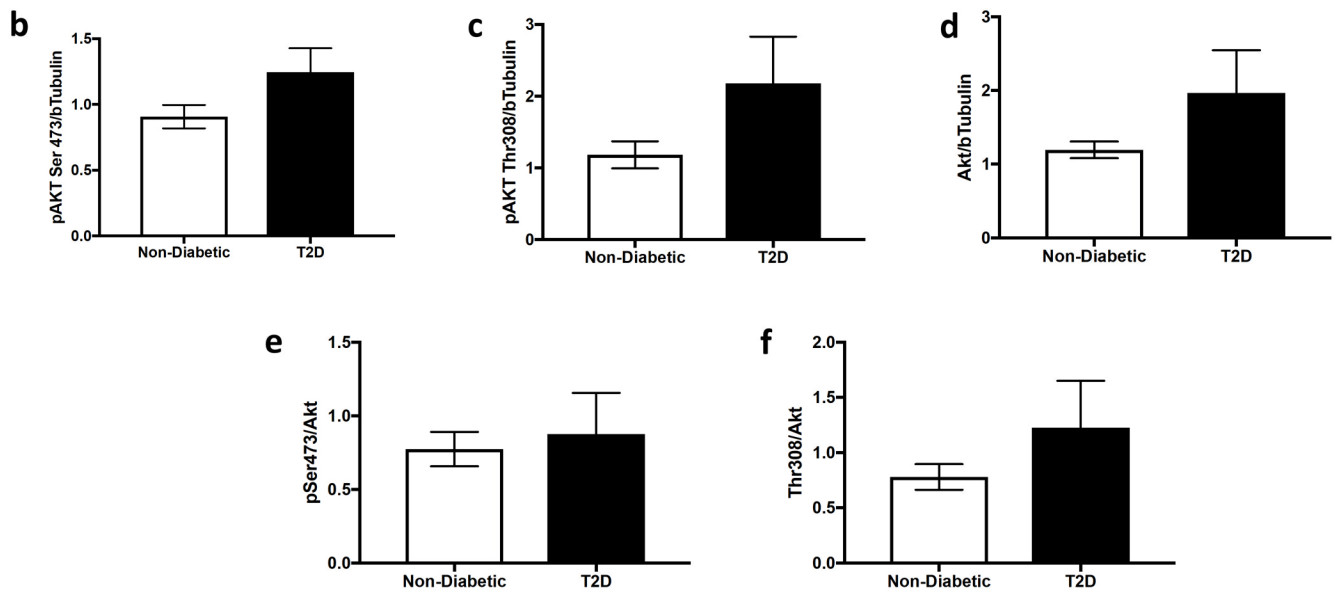
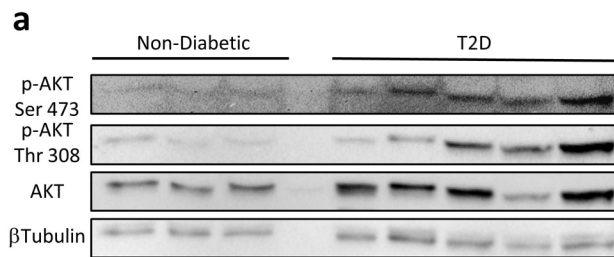
ESM Table 4 List of primers used for qPCR

Gene	Forward primer (5'–3')	Reverse primer (5'–3')
<i>ACTB</i>	5'-TGGACATCCGCAAAGACCTGTA-3'	5'-GGGCAGTGATCTCCTTCTGCAT-3'
<i>ANGPT1</i>	5'-ACAGGAGGATGGTGGTTTGA-3'	5'-CGCTTCTGACATTGCGCTTT-3'
<i>ANGPT2</i>	5'-TCAGTGGCTAATGAAGCTTGAGA-3'	5'-CCGCTGTTTGGTTCAACAGG-3'
<i>CXCL10</i>	5'-GCCATTCTGATTTGCTGCCT-3'	5'-GCAGGTACAGCGTACAGTTCT-3'
<i>CXCL12</i>	5'-ATTCTCAACACTCCAAACTGTGC-3'	5'-ACTTTAGCTTCGGGTCAATGC-3'
<i>DLK1</i>	5'-GCTTTCTAATCGGCTCGGGA-3'	5'-CGGCGACTTTCGTTTTTCCTC-3'
<i>DLK4^a</i>	5'-TTGCCACCAGATGCACTCAT-3'	5'-CACATAGTGGCCGAAGTGGT-3'
<i>EFNB2</i>	5'-CCATGGTAACCAGCCACAGT-3'	5'-CCCCTCTCCCCATCCTAAA-3'
<i>FGF2</i>	5'-TCCACCTATAATTGGTCAA-3'	5'-CATCAGTTACCAGCTCCCCC-3'
<i>IGFBP2</i>	5'-CGAGGGCACTTGTGAGAAGC-3'	5'-CCAGCTCCTTTCATACCCGAC-3'
<i>JAG1</i>	5'-CGTCATTGTGTTACCTGCGG-3'	5'-TGCGCAGCCTTTTATTCCCT-3'
<i>LEP</i>	5'-AATGCATTGGGGAACCCTGT-3'	5'-AGGAGACTGACTGCGTGTGT-3'
<i>NRP1</i>	5'-GAAACTCCTCTGTCTCCCGC-3'	5'-TGTTTCTGGACCCGTTGGAG-3'
<i>SEMA6A</i>	5'-GCTAGCAGAAAAGGGACTAACG-3'	5'-CGCCTGCTCTCTAGCCAGT-3'

<i>SPRY2</i>	5'-GCGCTTGTAGAAGGGGAGT-3'	5'-ATTCCCCGCTCATGAACA-3'
<i>THBS1</i>	5'-TGACAACAATCAGGATATATGATGA-3'	5'-TTGGGCACATAGGGACAGTT-3'
<i>TIE2</i>	5'-GGGACCCACACTTCCAACAA-3'	5'-TTTGGTATCAGCAGGGCTGG-3'
<i>VEGFA</i>	5'-TGTCTAATGCCCTGGAGCCT-3'	5'-GCTTGTCACATCTGCAAGTAGG-3'
<i>VEGFB</i>	5'-GAGATGTCCCTGGAAGAAC-3'	5'-GAGTGGGATGGGTGATGTCAG-3'
<i>18S</i>	5'-CCCAGTAAGTGCGGGTCATAA-3'	5'-CCGAGGGCCTCACTAAACC-3'
<i>GAPDH</i>	5'-AGCCGCATCTTCTTTTGCCT-3'	5'-TGACGAACATGGGGGCATCA-3'

^aAlso known as *DLL4*

ESM Fig. 1



Supplementary Figure 1. Western blot analysis of AKT. (a) Blots showing the phosphorylation level of AKT in pericytes isolated from the BM of T2D and nondiabetic patients. Each lane corresponds to an individual cell line. (b-d) Bar graphs showing average results expressed as AKT/tubulin ratio. (e&f) Bar graphs showing average results expressed as pAKT/total AKT ratio. No significant difference was denoted in the comparison. Analysis was performed by Student's t test.