

SUPPLEMENTARY FIGURE LEGENDS

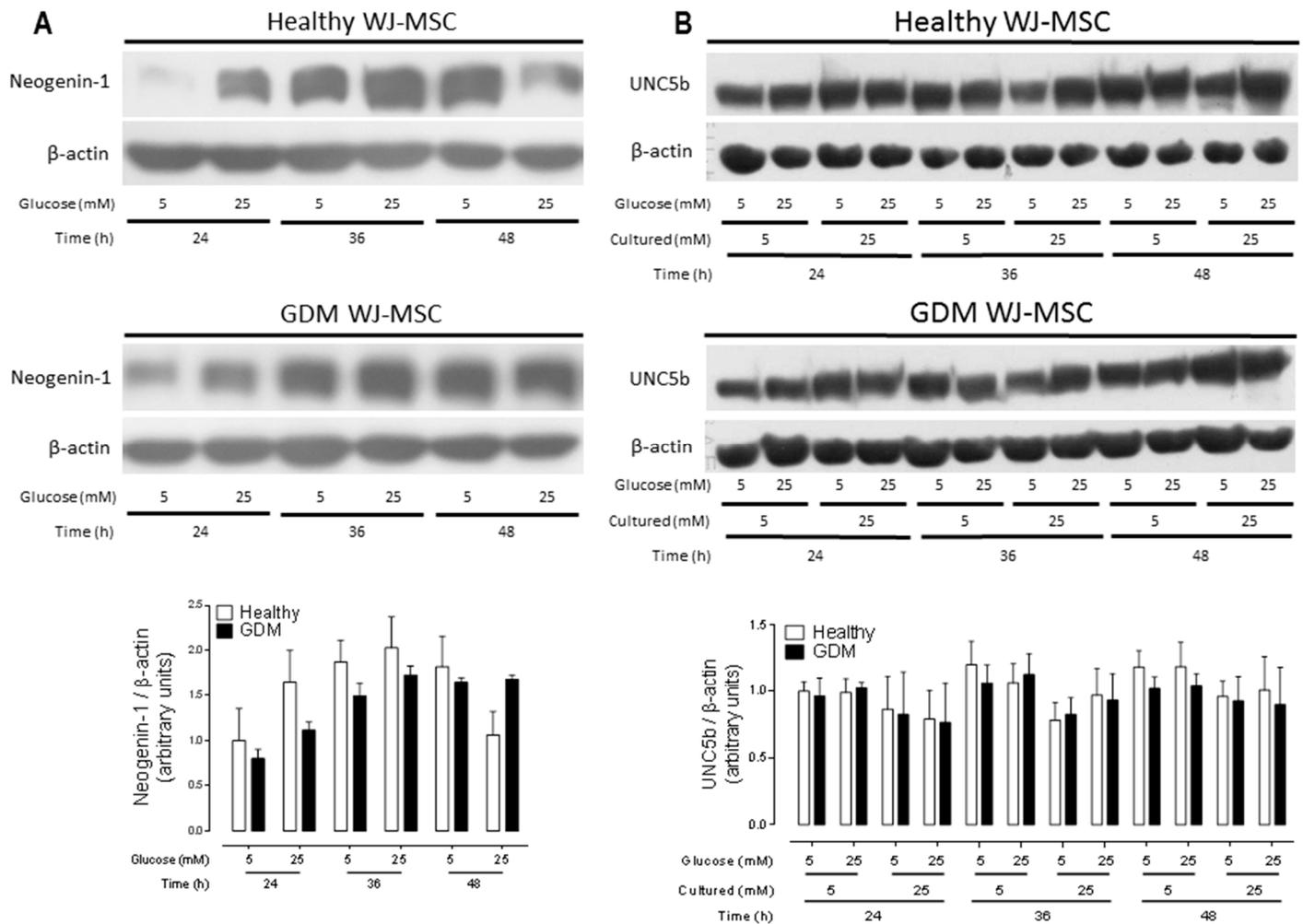


Figure S1. Protein levels of classical Netrin-1 receptors in normal and GDM WJ-MSC. *A.* Whole cell lysate was evaluated by Western blot for Neogenin-1 in WJ-MSC from normal and GDM cultures. β -actin was used as internal loading control. Exposure to different D-glucose concentration 5 - 25 mM for 24 - 48 hours. Data correspond to the mean \pm S.E.M. (normal n=5, GDM n=3). *B.* Western blot for UNC5b in normal and GDM WJ-MSC. β -actin was used as internal loading control. Each quantified result corresponds to the mean \pm S.E.M. (normal n=3, GDM n=6).

Table 2. Comparison of angiogenesis between healthy and GDM HUVEC.

Healthy vs. GDM	DMEM	EGM	CM 5 mM	CM 25 mM	CM 5 mM +2F5	CM 25 mM +2F5
DMEM	*	n.s.	n.s.	n.s.	*	*
EGM	*	n.s.	n.s.	n.s.	*	*
CM 5 mM	*	n.s.	*	*	*	*
CM 25 mM	*	n.s.	*	*	*	*
CM 5 mM + 2F5	*	n.s.	n.s.	n.s.	*	*
CM 25 mM + 2F5	*	n.s.	n.s.	n.s.	*	*

Figure S2. Statistical analysis of different experimental conditions, comparing angiogenesis among healthy and GDM HUVEC. Left column correspond to normal HUVEC (N) and upper row correspond to GDM HUVEC. Data correspond to the mean \pm S.E.M. (CM WJ-MSC and HUVEC, n=3). * $p < 0.05$ Normal vs. GDM, n.s. not significant.

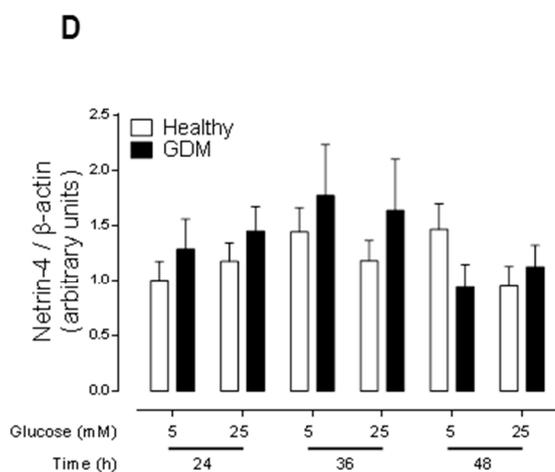
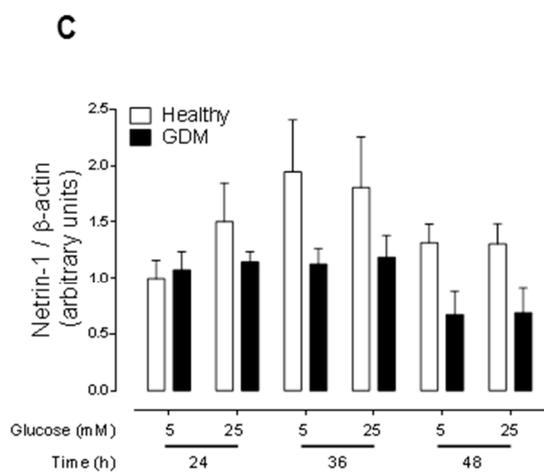
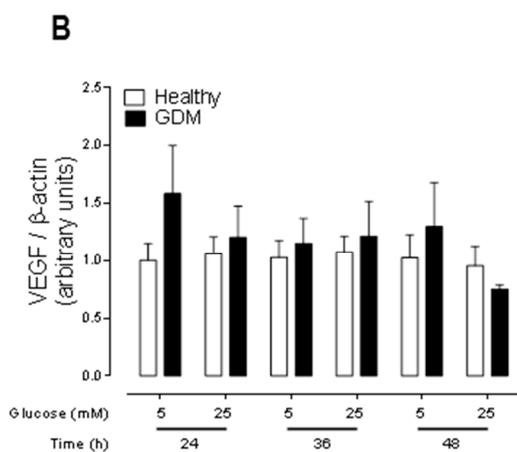
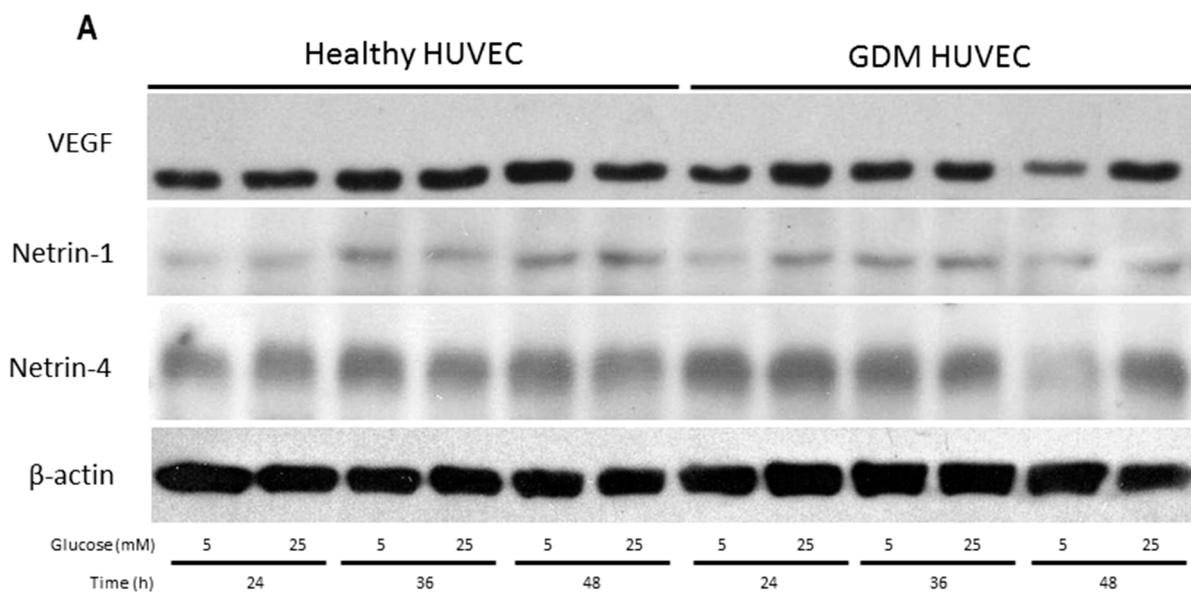


Figure S3. Protein expression levels of canonical and non-canonical ligands in normal and GDM HUVEC. *A.* Whole cell lysate was evaluated by Western blot for VEGF, Netrin-1, Netrin-4 in HUVEC from normal and GDM cultures. β -actin was used as internal loading control. Exposure to different D-glucose concentration 5 - 25 mM for 24 - 48 hours. Data correspond to the mean \pm S.E.M. (normal n=7, GDM n=3). *B.* Graph show quantified results for VEGF. *C.* Netrin-1 and *D.* Netrin-4.

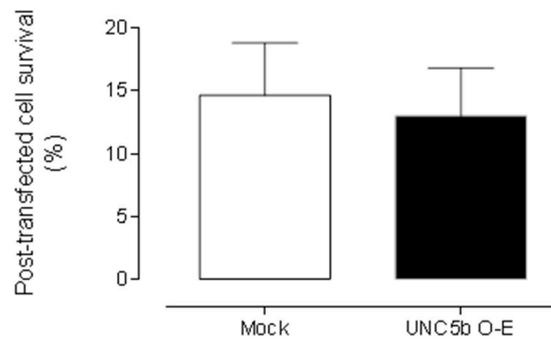


Figure S4. Cell survival after cell transfection. Healthy HUVEC was transfected with Mock over-expressing or UNC5b O-E construct (1 μ g/well) in primary cell medium 20% FBS, and cultured for 48 hours in normal HUVEC.