

Supplementary Table 1. Primer sequence of cytokine genes.

Gene	Access No.	Forward	Reverse	Length
Itb	NM_008518.2	tatcactgtcctggctgtgc	tcctggaagcattggatctc	315
casp1	BC008152.1	aaagaaacatgcgcacacag	cctctttgccctcaggatct	266
cxcl9	BC003343.1	tcctttgggcatcatcttc	agtccggatctaggcaggtt	126
cxcr2	NM_009909.3	gctgcctcactttctccag	agggcatgccagagctataa	2919
ccl8	NM_021443.3	acgctagccttactccaaa	tctggaaaaccacagcttcc	111
cxcl11	NM_019494.1	gctgctgagatgaacaggaa	actttgtcgcagccgttact	126
il1f6	NM_019450.3	tggcagctcagaaacaacat	ggcatgggagcaaggaata	139
ccl4	NM_013652.2	gccctctctcctcttgct	gtctgcctcttttggtcagg	114
cxcl10	NM_021274.1	aagtgtgccgtcattttct	gtggcaatgatctcaacacg	126
ccl20	NM_016960.2	cttgctttggcatgggtact	aggagggtcacagccctttt	114
il1f8	AY071842.1	ctttggaccaaggcaatgat	ttccagtcaggaccatacc	107
cxcr3	NM_009910.2	gcaagttcccaaccacaagt	tctcgttttccccataatcg	1506
cxcl15	NM_011339.2	tcctgctggctgtccttaac	taattgggccaacagtagcc	129
il1b	NM_008361.3	tgtaaagtcacacctttga	tgctctcatcctggaaggctc	201
il13	NM_008355.3	cagctccctggttctctcac	ggaatccagggtacacaga	104
ccl6	M58004.1	aggctggcctcatacaagaa	tcccctcctgctgataaaga	111
ccr5	D83648.1	tcctagccagaggagggtgag	agccgcaattgtttcacat	2823
il1a	NM_010554.4	gcaacgggaagattctgaag	tgacaaacttctgcctgacg	173
il10	M37897.1	tgctatgctgcctgctctta	tcatttccgataaggcttgg	152
cxcr5	NM_007551.2	catgggctccatcacatata	gtgcctctccaggattacca	2514

Supplementary Figure 1. Increased expression of VEGFR1 protein in Akita diabetic mouse retina. (A & B) Western blots (WB) results. The anti-VEGFR1 antibody MF1 detected a protein band of approximately 180KDa in the retinas of 8~9-month-old (lane 2 in A & left lane 2 in B) and 5~6-month-old (left Lane 3 in B) Akita diabetic mice but did not (lane 1 in A) or weakly (left lane 1 in B) in the retinas of the non-diabetic control mice. For protein loading controls, the anti- β -actin antibody was mixed with MF1 and probed the protein blots simultaneously (A) or it separately probed the striped protein blots (B). (C & D) IF results showed VEGFR1 protein localized in the blood vessels of the diabetic mouse retina (D) but was not detected in the non-diabetic control mouse retina (C). GCL: ganglion cell layer; IPL: inner plexiform layer; INL: inner nuclear layer; OPL: outer plexiform layer; ONL: outer plexiform layer. Scale bar: 50 μ m. (E & F) Quantification of WB (E) and IF (F) showed expression of VEGFR1 protein is up regulated in the retinas of Akita diabetic mice compared to non-diabetic control mice.

The results were averaged from four Akita diabetic mice and four non-diabetic control mice (n=4).



