Supplemental Fig. S1

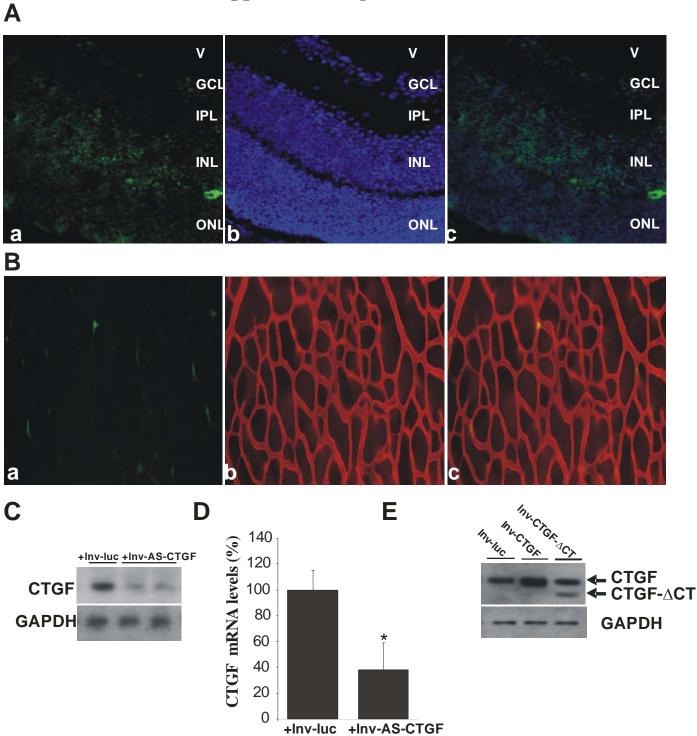


Fig. S1. Lentivirus-mediated transgene expression and protein localization in retinas from OIR mice. A, mouse pups were injected intravitreously with the lnv-GFP lentiviral vector at P4 and subjected to OIR as described in "Experimental Procedures". Eyes were enucleated at P17, fixed in PFA for 30 min and cryostat sections were

prepared and mounted on slides. GFP fluorescence was visualized by fluorescence microscopy (a). Nuclear staining with DAPI is shown in (b) and overlay of (a) and (b) is shown in (c). V: vitreous; GCL: ganglion cell layer. IPL: inner plexiform layer; INL: inner nuclear layer. ONL: outer nuclear layer. B, localization of GFP in a flat mounted preparation of retina at P17 after intravitreous injection of lnv-GFP at P4 and OIR at P7. GFP autofluorescence and type IV collagen immunostaining are shown in (a) and (b) respectively and overlay of (a) and (b) is shown in (c). C-D, intravitreous injection of lnv-AS-CTGF effectively reduced CTGF/CCN2 mRNA (C) and protein (D) levels in OIR retinas. Mouse pups were intravitreously injected at P4 with either lnv-luc or lnv-AS-CTGF vector. CTGF/CCN2 mRNA and protein levels were analyzed by qPCR and Western immunoblotting respectively as described in "Experimental Procedures". Data shown in (D) are means +S.E. of CTGF/CCN2 mRNA levels normalized to those of 18S rRNA from three measurements. The experiment was repeated at least twice with nearly identical results. *, p<0.05 vs lnv-luc. E, expression pattern of the dominant negative variant of CTGF/CCN2, CTGF-ΔCT in retinal protein homogenates. Mouse pups were intravitreously injected at P3 with either lnv-luc, lnv-CTGF or lnv-CTGF-ΔCT vector and protein homogenates were prepared and analyzed by Western immunoblotting using CTGF/CCN2 antibody. GAPDH was used as a loading control.