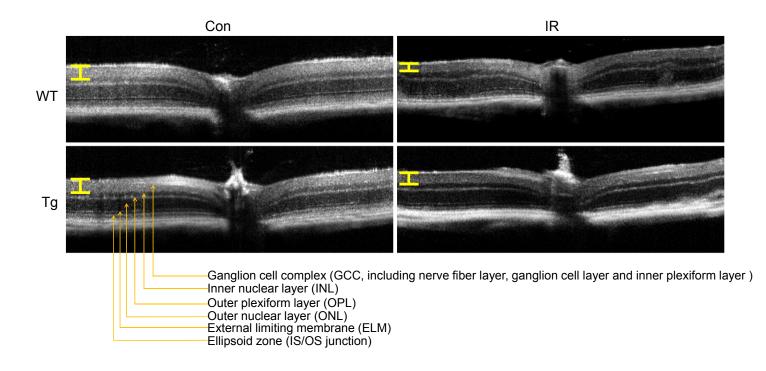
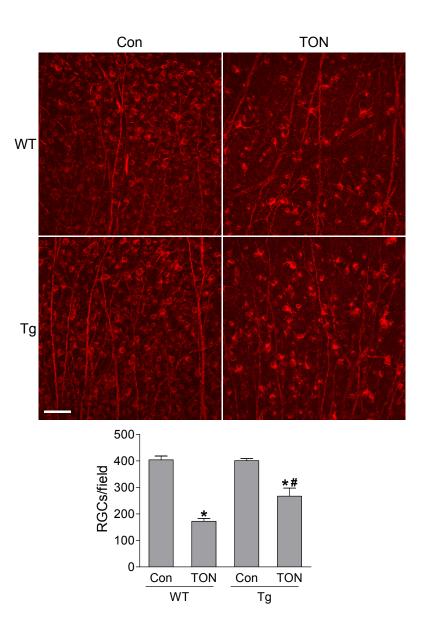


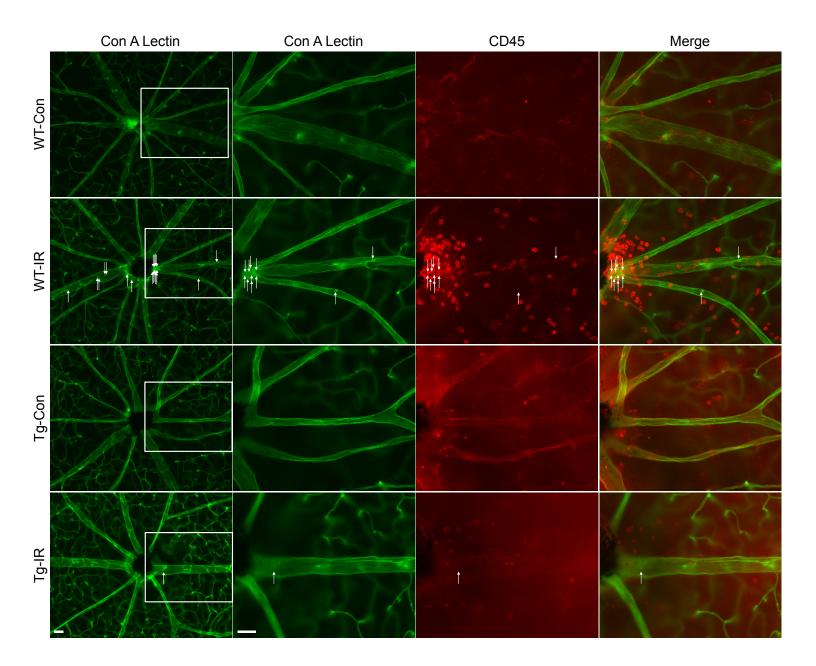
Supplementary Fig. S1. HSF1 expression in the retina. Retinal sections from WT mice at 6 hours after IR were stained with antibodies against HSF1(green) and different retinal cell markers (red): Tuj1, RGC maker; Calretinin, amacrine cell marker; PKC $\alpha$ , bipolar cell marker. Blue: DAPI staining for the nuclei. Scale bar, 25 µm. GCL, ganglion cell layer; INL, inner nuclear layer; ONL, outer nuclear layer.



Supplementary Fig. S2. Enlarged OCT images of Figure 4A .



Supplementary Fig. S3. HSF1 overexpression prevents TON-induced loss of retinal ganglion cells. Representative images of retinal flatmounts labeled with Tuj1 antibody (red) at 7 days after TON. Bar graph represents the number of Tuj1-positive cells per field. N=3-4 mice; \*P<0.05 versus respective control, #P<0.05 HSF1-Tg-TON versus WT-TON. Scale bar: 50 µm.



Supplementary Fig. S4. HSF1 overexpression decreases leukostasis in the retina after IR injury. Representative images of leukostasis in the central retinas. WT and HSF-Tg mice were subjected to IR and leukostasis assay was performed at 24 hours after IR. Green: Con A-labeled retinal vasculature and adherent leukocytes. Red: CD45 immunostaining for leukocytes. Rectangle in the left rows of images are zoomed in and arrows indicate stationary leukocytes adherent to the vascular endothelium.