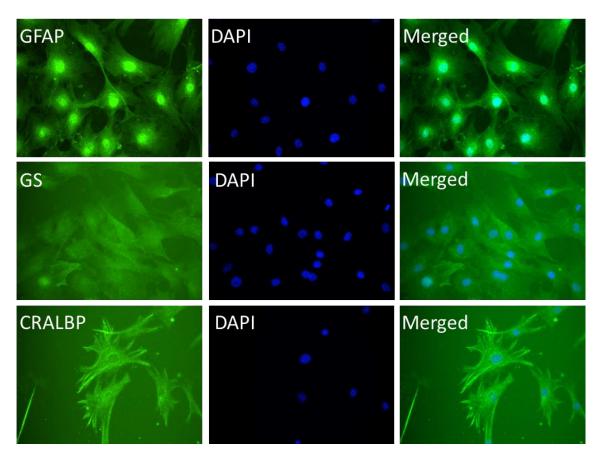
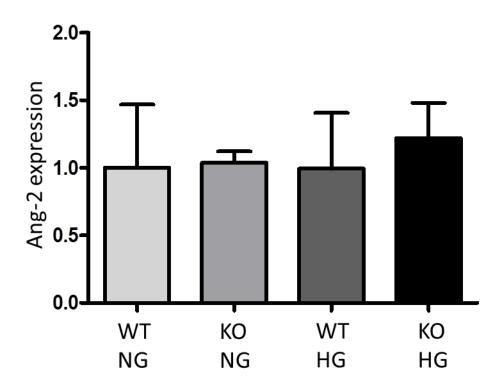


Supplementary Fig. 1: GFAP is expressed in astrocytes (arrowheads) and Müller cells (arrows) in the retina. GFAP (red) and GS (green) were stained in the retina. GFAP is expressed in astrocytes in WT NC, but enhanced and co-localizes with GS in WT DC and KO NC/DC retinas. GCL: ganglion cell layer; INL: inner nuclear layer; ONL: outer nuclear layer. Scale bar:  $20\mu m$ .



Supplementary Fig. 2: Characterization of Müller cells in vitro. Müller cells were stained individually with antibodies against GFAP, GS and CRALBP. DAPI was used for nuclear staining. Positive staining indicates successful isolation of Müller cell in vitro. Images were taken with a 40X objective lens.



Supplementary Fig. 3: Ang-2 RNA expression is unaltered in NDPK-B KO NG/HG and WT NG/HG Müller cells. Ang-2 RNA expression was measured by qPCR in RNA extracted from WT and KO Müller cells stimulated with and without HG (30mM, 24h). Cells of WT HG, KO NG and HG show no changes in Ang-2 expression in comparison to control WT NG cells. Data are presented as mean±SEM for n=3.