

**Supplementary Figure 1: Expression of *Yap*, *Ctgf* and *Cyr61* in *rd1* mouse model.**

Expression of *Yap* (1448363\_at), *Ctgf* (1416953\_at) and *Cyr61* (1416039\_x\_at) during the course of rod degeneration in the *rd1* retina (data retrieved from the KBaSS website).

**Supplementary Figure 2: Reactive gliosis of Müller cells during retinal degeneration in *rd10* mice**

Immunostaining with anti-GFAP (*grey*) antibody on retinal sections of WT and *rd10* mice at different stages from P10 to P60. Nuclei are DAPI counterstained (*blue*).  
*Scale bar*. 20  $\mu$ m.

**Supplementary Figure 3: Quantification of YAP expression during retinal degeneration in *rd10* mouse model using multiple loading controls**

**(A)** Immunostaining with anti- $\alpha$ -tubulin (*red*) antibody on retinal sections of WT adult mouse. Nuclei are DAPI counterstained (*blue*). **(B)** Western-blot of retinal protein extracts from four WT and five *rd10* mice at P30, probed with anti-YAP, anti- $\alpha$ -tubulin ( $\alpha$ -tub), anti-calbindin (Cal) and anti-PKC  $\alpha$ . Histogram representation corresponds to the quantification of YAP western-blot signals normalized to  $\alpha$ -tubulin ( $\alpha$ -tub) or calbindin (Cal) or PKC  $\alpha$  and relative to WT (dashed line). Mean values  $\pm$  SEM are shown. \* indicates *p*-value  $\leq 0.05$  (Mann-Whitney test). onl: outer nuclear layer; inl: inner nuclear layer; ipl: inner plexiform layer; gcl: ganglion cell layer. *Scale bar*. 20  $\mu$ m.

#### **Supplementary Figure 4: YAP expression during MNU-induced retinal degeneration**

**(A)** Immunostaining with anti-YAP (*red*) antibody on retinal sections of WT mice 72hrs after PBS (Control) or MNU injection. Nuclei are DAPI counterstained (*blue*).

**(B)** Representative western-blots of retinal protein extracts from WT mice 72hrs after PBS (Control) or MNU injection, probed with anti-YAP antibody or anti- $\alpha$ -tubulin ( $\alpha$ -tub) as a loading control. Bars represent quantified YAP western-blot signals normalized to  $\alpha$ -tubulin and relative to the control condition (dashed line). Mean values  $\pm$  SEM are shown. \* indicates  $p$ -value  $\leq 0.05$  (Mann-Whitney test). Scale bar: 20  $\mu$ m.

#### **Supplementary Figure 5: TEAD1 expression during MNU-induced retinal degeneration**

Representative western-blots of retinal protein extracts from WT mice 72hrs after PBS (Control) or MNU injection, probed with anti-TEAD1 antibody or anti- $\alpha$ -tubulin as a loading control. Histogram representation of the quantification of TEAD1 western-blot signals normalized to  $\alpha$ -tubulin ( $\alpha$ -tub) and relative to the control condition (dashed line). Mean values  $\pm$  SEM are shown. \* indicates  $p$ -value  $\leq 0.05$  (Mann-Whitney test).

## Supplementary Table 1

PRIMERS	SEQUENCE
<i>Yap</i> forward	5' TCCTGATGGATGGGAGCAAG 3'
<i>Yap</i> reverse	5' CTCTGGTTCATGGCAAACGA 3'
Tead1 forward	5' TCTGGGCGGACTTAAACTGC 3'
Tead1 reverse	5' GAACCTCGCATACTCCGTCTCT 3'
Tead2 forward	5' CGGAAGCCTGGTTATTGAGC 3'
Tead2 reverse	5' TTCCAGAAGAGCAAGGAGGG 3'
Cyr61 forward	5' TGAAGAGGCTTCCTGTCTTTGG 3'
Cyr61 reverse	5' CGGCACTCTGGGTTGTCATT 3'
Ctgf forward	5' GCCCTAGCTGCCTACCGACT 3'
Ctgf reverse	5' AGAACAGGCGCTCCACTCTG 3'
Gak forward	5' CTGCCCACCAGGCATTTG 3'
Gak reverse	5' CCATGTCACATACATATTCAATGTACCT 3'
MRPI46 forward	5' GGGAGCAGGCATTCCTACAG 3'
MRPI46 reverse	5' GGTCCGGTCATTTTTTTTGTCA 3'
SRP72 forward	5' CACCCAGCAGACAGACAAACTG 3'
SRP72 reverse	5' GCACTCATCGTAGCGTTCCA 3'
Tbp forward	5' CACAGGAGCCAAGAGTGAAGAAC 3'
Tbp reverse	5' ATCACAGCTCCCCACCATGT 3'

## Supplementary Table 2

### Primary antibodies

ANTIGENE	HOST	SUPPLIER	CATALOG #	DILUTION (IF)	DILUTION (WB)
YAP	mouse	Abcam	ab56701	1:50	1:1,000
Glutamine Synthetase	mouse	Abcam	ab64613	1:500	
SOX9	rabbit	EMD Millipore	AB5535	1:300	
TEAD1	rabbit	LifeSpan Biosciences	LS-B6651	1:50	1:1,000
GFAP	rabbit	DAKO	Z0334	1:500	
Calbindin D-28k	rabbit	Swant	300		1:500
PKC $\alpha$	rabbit	Sigma-Aldrich	P4334		1:100,000
$\alpha$ -tubulin	mouse	Sigma-Aldrich	T5168	1:5,000	1:200,000

### Secondary antibodies

NAME	HOST	SUPPLIER	CATALOG #	DILUTION (IF)	DILUTION (WB)
Alexa Fluor 555 anti-mouse Ig2A	goat	Thermo Scientific	Fisher A21127	1:200	
Alexa Fluor 488 anti-rabbit	goat	Thermo Scientific	Fisher A21206	1:200	
Alexa Fluor 633 anti-mouse IgG1	goat	Thermo Scientific	Fisher A21240	1:200	
Alexa Fluor 647 anti-rabbit	goat	Thermo Scientific	Fisher A21244	1:200	
HRP anti-mouse IgG	goat	Sigma-Aldrich	A4416		1:5,000
HRP anti-rabbit IgG	goat	Sigma-Aldrich	A4416		1:5,000

### Supplementary Table 3. Pathway-level analysis of DEG in *rd10* mouse model

KEGG ID	PATHWAY	NB OF COUNTS	GENES
mmu04151	PI3K-Akt signaling pathway	18	Atf4, Col1a2, Col2a1, Col4a6, Creb3l2, Csf1, Csf3r, Ghr, Il4ra, Itgb1, Itgb5, lama5, Lamb2, Lamc1, Myb, Osmr, Pgf, Vwf
mmu05200	Pathways in cancer	17	Arnt,Cebpa,Col4a6,Csf3r,E2f1,Foxo1,Itgb1,Lama5,Lamb2, Lamc1, Mlh1, Msh2, Pgf, Smad3, Smad4, Stat3, Tgfb2
mmu04630	Jak-STAT signaling pathway	14	Cish, Csf3r,Fhl1,fGhr,Ifngr1,Il10ra,Il13ra1,Il4ra,Il6st,Osmr,Socs2, Socs3, Stat3,Stat6
mmu04060	Cytokine-cytokine receptor interaction	12	Csf1,Csf3r,Ghr,Ifngr1,Il10ra,Il13ra1,Il1r1,Il1rap,Il4ra,Il6st,Osmr,Tgfb2
mmu05202	Transcriptional misregulation in cancer	12	Bcl6, Cebpa,Ewsr1,Foxo1,Id2,Kdm6a,Maf,Mllt3,Nfkbiz,Pbx3, Sin3a, Smad1
mmu04512	ECM-receptor interaction	11	Aggrn,Col1a2,Col2a1,Col4a6,Itgb1,Itgb5,Lama5,Lamb2,Lamc1, Npnt, Vwf
mmu04390	Hippo signaling pathway	11	Ajuba,Ctgf,Id2,Itgb2,Smad1,Smad3,Smad4,Sox2,Tea2,Tgfb2, Yap1
mmu04550	Signaling pathways regulating pluripotency of stem cells	10	Id2, Id4, Il6st, Isl1, Pax6, Smad1, Smad3, Smad4, Sox2, Stat3