**Source Data Legends- Sokolov et al**

***Figure 1 Source Data 1***

Quantification of *Nmnat1* mRNA levels in P0 WT and KO retinas. Numerical source data for retinal thickness quantification in P0, P4, and P10 WT and KO retinas.

***Figure 1—Supplement 1 Source Data 1***

Raw western blot scan of P4 WT and KO retinal lysate stained with anti-NMNAT1 antibody (700 channel).

***Figure 1—Supplement 1 Source Data 2***

Raw western blot scan of P4 WT and KO retinal lysate stained with anti-beta-tubulin antibody (800 channel).

***Figure 1—Supplement 1 Source Data 3***

Raw western blot scan of HEK293T cell lysate stained with anti-NMNAT1 antibody (700 channel). Band corresponding to NMNAT1 is clearly labelled.

***Figure 1—Supplement 1 Source Data 4***

Raw western blot scan of HEK293T cell lysate stained with anti-FLAG antibody (800 channel). Band corresponding to FLAG is clearly labelled.

***Figure 1—Supplement 1 Source Data 5***

Uncropped western blot scan of P4 WT and KO retinal lysate stained with anti-NMNAT1 antibody. Band corresponding to NMNAT1 is clearly labelled.

***Figure 1—Supplement 1 Source Data 6***

Uncropped western blot scan of P4 WT and KO retinal lysate stained with anti-beta-tubulin antibody. Band corresponding to beta-tubulin is clearly labelled.

***Figure 2 Source Data 1***

Numerical source data for retinal cell type quantification in P4 and P10 KO and WT retinas.

***Figure 3 Source Data 1***

Gene ontology (GO) overrepresentation analysis of genes differentially expressed in KO retinas at E18.5 and P4 timepoints. Numerical source data for expression (relative to WT levels) of select photoreceptor-specific genes in E18.5 and P4 KO retinas.

***Figure 3—Supplement 1 Source Data 1***

Numerical source data for expression (relative to WT) of select genes in P4 KO retinas using RNA-seq and RT-qPCR.

***Figure 3—Supplement 1 Source Data 2***

Numerical source data for quantification of PHH3-positive nuclei in P0 WT and KO retinal sections.

***Figure 3—Supplement 2 Source Data 1***

Gene ontology (GO) overrepresentation analysis of significantly changed genes in P4 KO retinas.

***Figure 3—Supplement 3 Source Data 1***

Gene ontology (GO) overrepresentation analysis of significantly changed genes in E18.5 KO retinas.

***Figure 3—Supplement 4 Source Data 1***

Numerical source data for expression (relative to WT) of retinal cell type-specific genes in E18.5 and P4 KO retinas from RNA-seq dataset.

***Figure 3—Supplement 5 Source Data 1***

Numerical source data for expression (relative to WT) of several synapse-specific genes in E18.5 and P4 KO retinas.

***Figure 4 Source Data 1***

Numerical source data for quantification of Caspase-3-positive (AC3+) and Caspase-3-negative (AC3-) pyknotic cells in WT and KO retinal sections. Numerical source data for expression (relative to WT) of cell death-related genes in P4 KO retinas. Numerical source data for relative abundance of cyclic ADP-ribose (cADPR) in P4 WT and KO retinas.

***Figure 4—Supplement 1 Source Data 1***

Numerical source data for expression (relative to WT) of cell death-related genes in E18.5 KO retinas. Numerical source data for relative abundance of cyclic ADP-ribose (cADPR) in E18.5 WT and KO retinas.

***Figure 4—Supplement 1 Source Data 2***

Uncropped western blot of P4 KO and WT retinal lysate stained with anti-Gasdermin D (GSDMD) antibody. Arrow denotes bands corresponding to GSDMD.

***Figure 4—Supplement 1 Source Data 3***

Uncropped western blot of P4 KO and WT retinal lysate stained with anti-beta tubulin antibody. Arrow denotes bands corresponding to beta-tubulin.

***Figure 4—Supplement 1 Source Data 4***

Raw western blot scan of P4 WT and KO retinal lysate stained with anti-Gasdermin D (GSDMD) antibody (700 channel).

***Figure 4—Supplement 1 Source Data 5***

Raw western blot scan of P4 WT and KO retinal lysate stained with anti-beta tubulin antibody (800 channel).

***Figure 4—Supplement 2 Source Data 1***

Numerical source data for expression of cell death pathway genes in P4 WT and KO retinas.

***Figure 5 Source Data 1***

Metabolic pathway overrepresentation analysis on significantly changed metabolites in P4 KO retinas. Numerical source data for abundance (relative to WT) of various metabolites in P4 KO retinas. Numerical source data for expression of glycolysis/TCA pathway enzymes in P4 WT and KO retinas.

***Figure 5 Source Data 2***

Numerical source data for E18.5 and P4 LC-MS/MS experiments; peak intensity tables for all detected metabolites in E18.5 and P4 KO and WT retinas.

***Figure 5—Supplement 1 Source Data 1***

Numerical source data for abundance (relative to WT) of acylcarnitine species in P4 KO retinas. Numerical source data for expression (relative to WT) of *Aldh8a1* and *Ogdhl* in E18.5 KO retinas.

***Figure 5—Supplement 1 Source Data 2***

Numerical source data for abundance (relative to WT) of nucleotide and amino acid metabolites in P4 KO retinas.