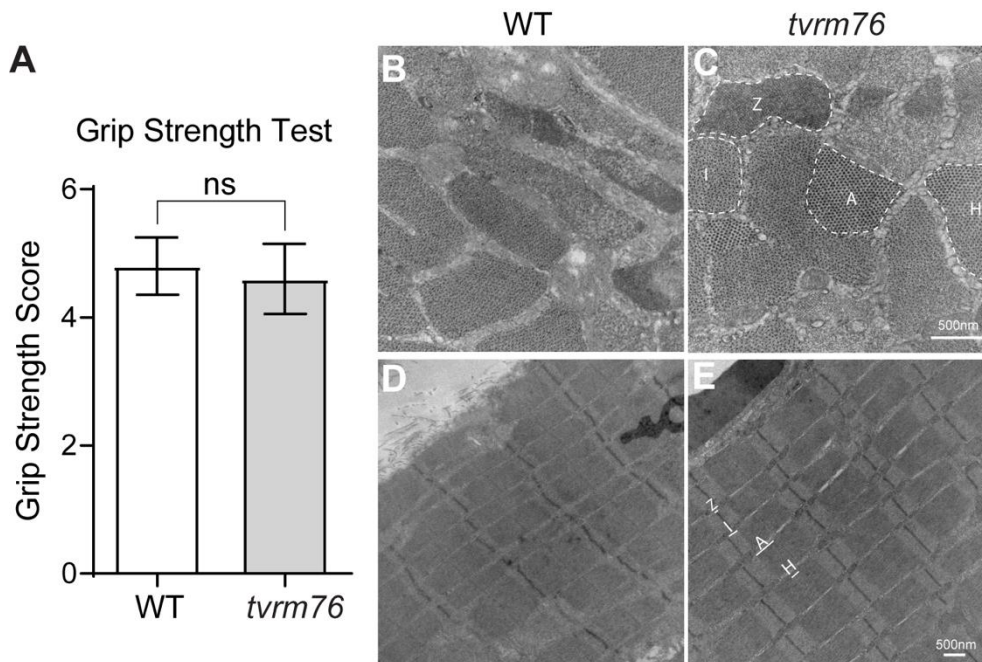


**Figure S1.** Photoreceptor degeneration in *tvrm76*. (A,B) Quantification of ONL nuclei relative to INL in the central and peripheral retinal regions, respectively. Significant loss of photoreceptors in *tvrm76* mice is observed compared to their wild-type littermates and *Dpagt1* rod photoreceptor knockouts at one month of age in the central retina, while peripheral loss becomes significant at 3 months. Values represent mean  $\pm$  SEM;  $n=3-6$  \*\* $p<0.01$ ; \*\*\* $p<0.001$ ; \*\*\*\* $p<0.0001$  (One-way ANOVA).



**Figure S2.** Grip strength and muscular architecture in *tvrm76* and littermate WT controls. (A) No significant difference in grip strength of *tvrm76* compared to wildtype controls at 1 month of age. Values represent mean  $\pm$  SEM;  $n=5$  ( $p=0.999$ , Student t-test). (B-E) Transmission electron microscopy of gastrocnemius muscle samples in transverse (B,C) and longitudinal (D,E) sections. No presence of tubular aggregates or abnormal features were observed in *tvrm76* mutants compared to littermate controls at 2 months of age. Z=Z-line, I=I-Band, A=A-Band, H=H-Zone.

**Table S1.** Primers for qPCR.

<b>Gene</b>	<b>Sequences (5' – 3')</b>
<i>Actb</i>	F: CCAGTTCGCCATGGATGACGATAT
	R: GTCAGGATACCTCTCTTGCTCTG
<i>Atf4</i>	F: TCGATGCTCTGTTTCGAATG
	R: AGAATGTAAAGGGGGCAACC
<i>Hspa5</i>	F: CCTCTCTGGTGATCAGGATA
	R: CGTGGAGAAGATCTGAGACT
<i>Ddit3</i>	F: CCACCACACCTGAAAGCAGAA
	R: AGGTGAAAGGCAGGGACTCA
<i>Dpagt1</i>	F: GGCCGGTCAGTCACTAGTCA
	R: GGTGTCTCCCACAAACACGC
<i>Hsp90b1</i>	F: GATGGTCTGGCAACATGGAG
	R: CGCCTTGGTGTCTGGTAGAA
<i>Padi2</i>	F: CAAGATCAAGCCCCACCTGAT
	R: AGTTGCCCCAACCACTACTT