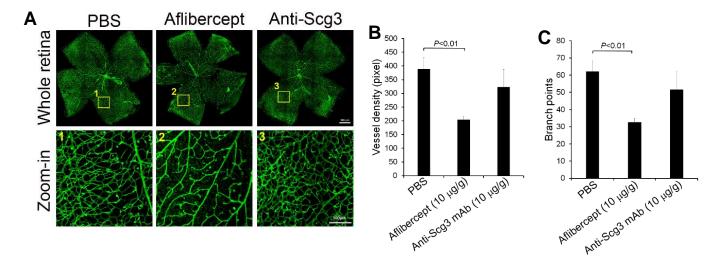


Supplementary Fig. 1. Anti-Scg3 mAb to prevent OIR via intraperitoneal injection. Therapeutic agents were injected at P12. **a** Representative images of OIR retina. **b** Quantification of RNV. **c** Quantification of NV tufts. **d** Quantification of branch points. Bar = $100 \mu m$ (zoom-in). n= 11 eyes (PBS), n= 16 eyes (aflibercept), n= 17 eyes (anti-Scg3 mAb). \pm SEM, one-way ANOVA test.



Supplementary Fig. 2. Aflibercept, but not anti-Scg3 mAb, inhibits the development of retinal vasculature at P15. Aflibercept (10 mg/Kg body weight) or anti-Scg3 ML78.2 mAb (10 mg/Kg) was intraperitoneally injected into neonatal mice at P3, 5, 7, 9, 11 and 13. At P15, retinas were isolated and analyzed for retinal vasculature as in Fig. 6. **a** Representative images of retinas in the bright field and fluorescent vasculature. **b** Quantification of vessel density. **c** Quantification of branch points. n=5 eyes (PBS), 6 eyes (aflibercept 5 or 10 mg/Kg), 4 eyes (anti-Scg3 mAb). \pm SEM, one-way ANOVA test.