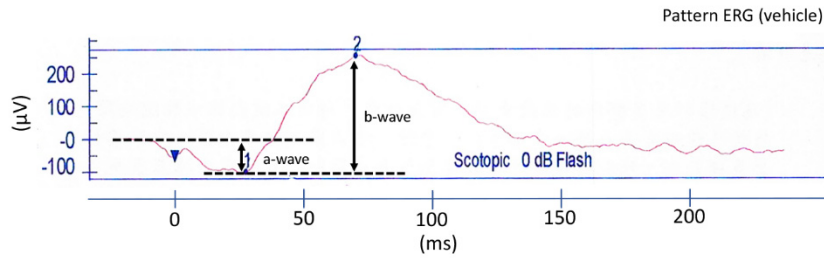


Supplementary Table S1. Mutagenic primers for site-directed mutagenesis.

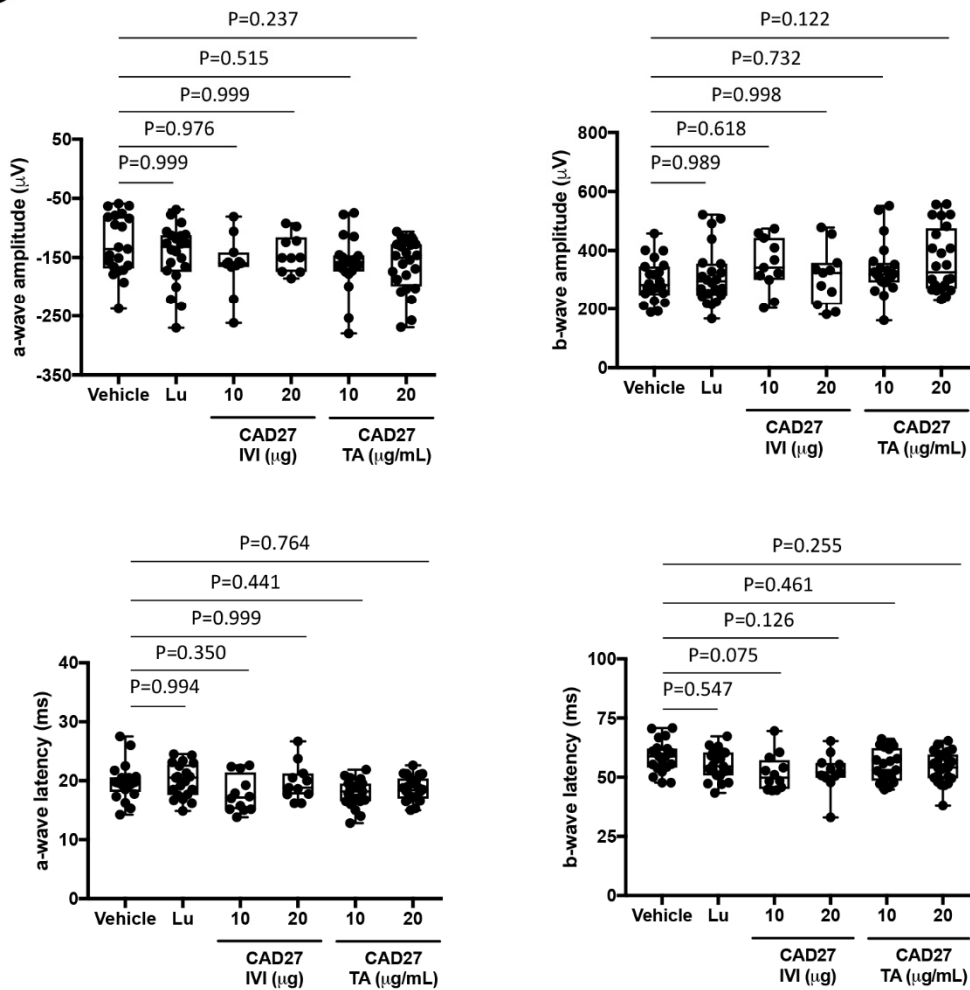
Primer	Sequence
T173 FWD	5'-GAGTTTACACACCTGTACTAACTGATTGTGCGGCCAGAC-3'
T173 REV	5'-GTCTGGCCGCACAATCAGTTAGTACAGGTGTGTAAACTC-3'
D165 FWD	5'-CAAGGACATCCGTTGCAAGTAAGATGAGTTTACACACCTGT-3'
D165 REV	5'-ACAGGTGTGTAAACTCATCTTACTTGCAACGGATGTCCTTG-3'
I157 FWD	5'-GGCAAGAACGTGCTGTAAAACAAGGACATCCGTTGCAAGGATGATG-3'
I157 REV	5'-CATCATCCTTGCAACGGATGTCCTTGTTTTACAGCACGTTCTTGCC-3'
N149 FWD	5'-GAAGGTTTCATGTCATCTTCTAATAACAAGGGCAAGAACGTGC-3'
N149 REV	5'-GCACGTTCTTGCCCTTGTAATTAGAAGATGACATGAACCTTC-3'
T141 FWD	5'-ATCTGTGGCCCTGGCTAAAAGAAGGTTTCATGTCATCTTCAACTACAA-3'
T141 REV	5'-TTGTAGTTGAAGATGACATGAACCTTCTTTTAGCCAGGGCCACAGAT-3'

FWD: forward primer. REV: Reverse primer.

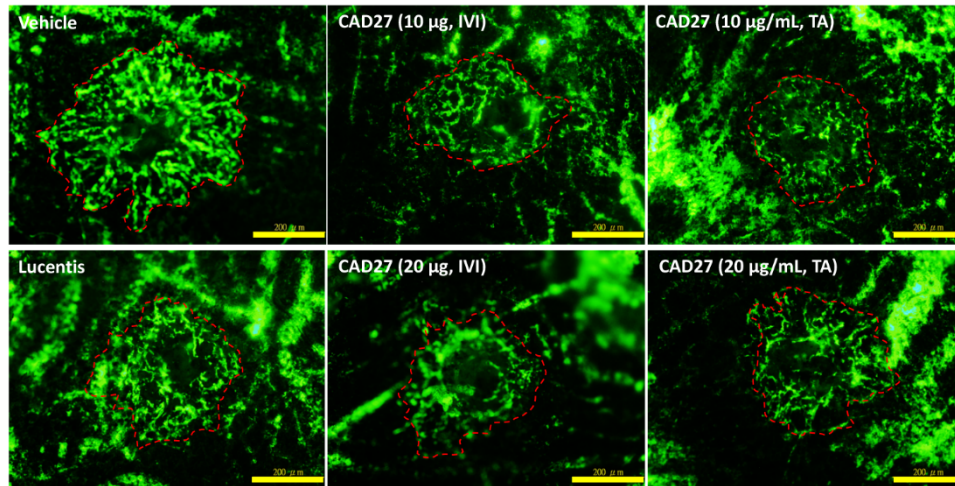
A



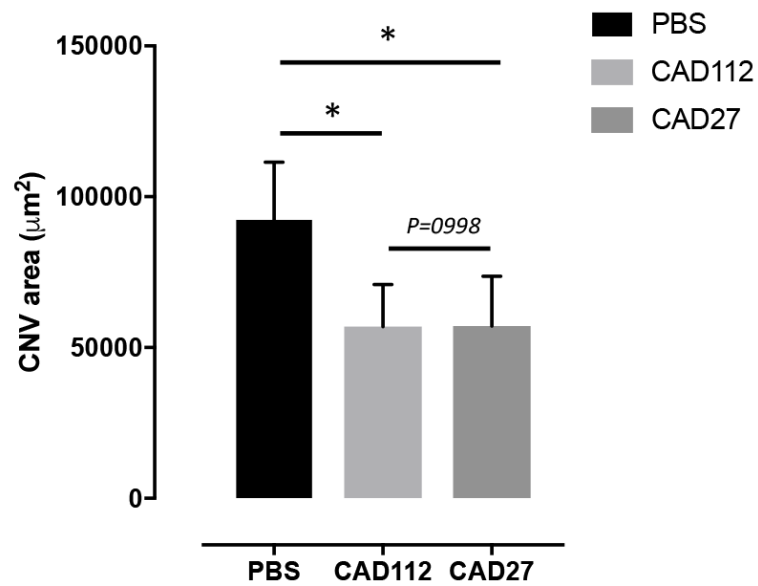
B



Supplementary Figure S1. The effect of intravitreal and topical application of CAD27 on retinal function. (A) Schematic representation of ERG waveforms at selected intensities from control (vehicle injected eye). (B) Group of averaged ERG waveforms (a-wave amplitude, μV ; b-wave amplitude, μV ; a-wave latency, ms; and b-wave latency, ms). Statistical analysis between groups was performed using one-way ANOVA followed by Tukey's multiple comparisons test.



Supplementary Figure S2. The original images of the choroidal vascularity of laser-induced CNV lesions used in Figure 5A. The area with the red dashed line indicates CNV lesion. Scale bar: 200µm.



Supplementary Figure S3. Flat-mount analysis of choroidal vascularity after an intravitreal application of CAD112 and CAD27. Choroidal vascularity of laser-induced CNV lesions was examined by labeling using FITC-dextran. FITC-dextran labeling CNV in the choroidal flat-mounts was quantified and data are presented as mean $\pm$ SD (n = 6 eyes). CAD112 (10 µg/5µL), CAD27 (20 µg/5µL). using one-way ANOVA followed by Tukey's multiple comparisons test. (* $p < 0.01$).