



**Supplementary Figure S1.** Rats received latanoprost instillation and subsequent subconjunctival injections of biotin-P-IQACRG (30 nmol/day for two days). Three days prior to the first subconjunctival injection, rats underwent retrograde labeling of RGCs with aminostilbamidine (Fluoro-Gold). Twenty-four hours after the last subconjunctival injection, eye tissues were analyzed histologically. Biotin-P-IQACRG was visualized with fluorescein-conjugated streptavidin (green in merged image). Although the strongest signal was in the sclera, avidin fluorescence was detected throughout the retina. RGCs were immunologically identified, after photobleaching, by incubation with rabbit anti-Fluorescent Gold antisera (Millipore, 1:2,000 dilutions) and Alexa Fluor 555 labeled-secondary antibody (red in merged image). RGCs contained the biotinylated peptide (yellow in merged image, marked by arrowheads). Cell nuclei were counterstained with Hoechst 33342 (blue in merged image). Scale bars = 50  $\mu$ m. GCL, ganglion cell layer; IPL, inner plexiform layer; INL, inner nuclear layer.