

Supplemental Figure 1. Immunocytochemical staining of ET_A receptor and β -tubulin III:

Co-immunocytochemical staining of ET_A receptor and β -tubulin III was performed in RGCs treated with vehicle, ET-1 or ET-3 for 24 hours. An enhanced staining of ET_A receptor was detected in RGCs treated with ET-1 or ET-3 compared to untreated controls. The staining of ET_A receptor was detected mainly in soma of RGC cells. On the other hand, ET_A receptor was co-localized with β -tubulin III, which is a neural marker of RGCs. The result confirmed that the staining of ET_A receptor was in RGCs. DIC pictures also proved the observation.

Supplemental Figure 2. Immunocytochemical staining of GAP-43, phosphorylated-c-Jun, Brn-3b with other neuronal markers:

Co-immunocytochemical staining of GAP-43, p-c-Jun and β -tubulin III (a protein marker of neuronal cells) were paired with Neurofilament-L (a protein marker of neuronal cells), RNA-Binding Protein With Multiple Splicing (RBPMS, a protein marker of neuronal cells) and Brn-3b (high expression in RGCs) to identify the purity of the cultured RGCs. The images captured using Zeiss 510meta Confocal microscope showed that these proteins and protein markers were co-localized in soma and dendrites of RGCs. The morphology of cells was also confirmed DAPI staining and DIC images.