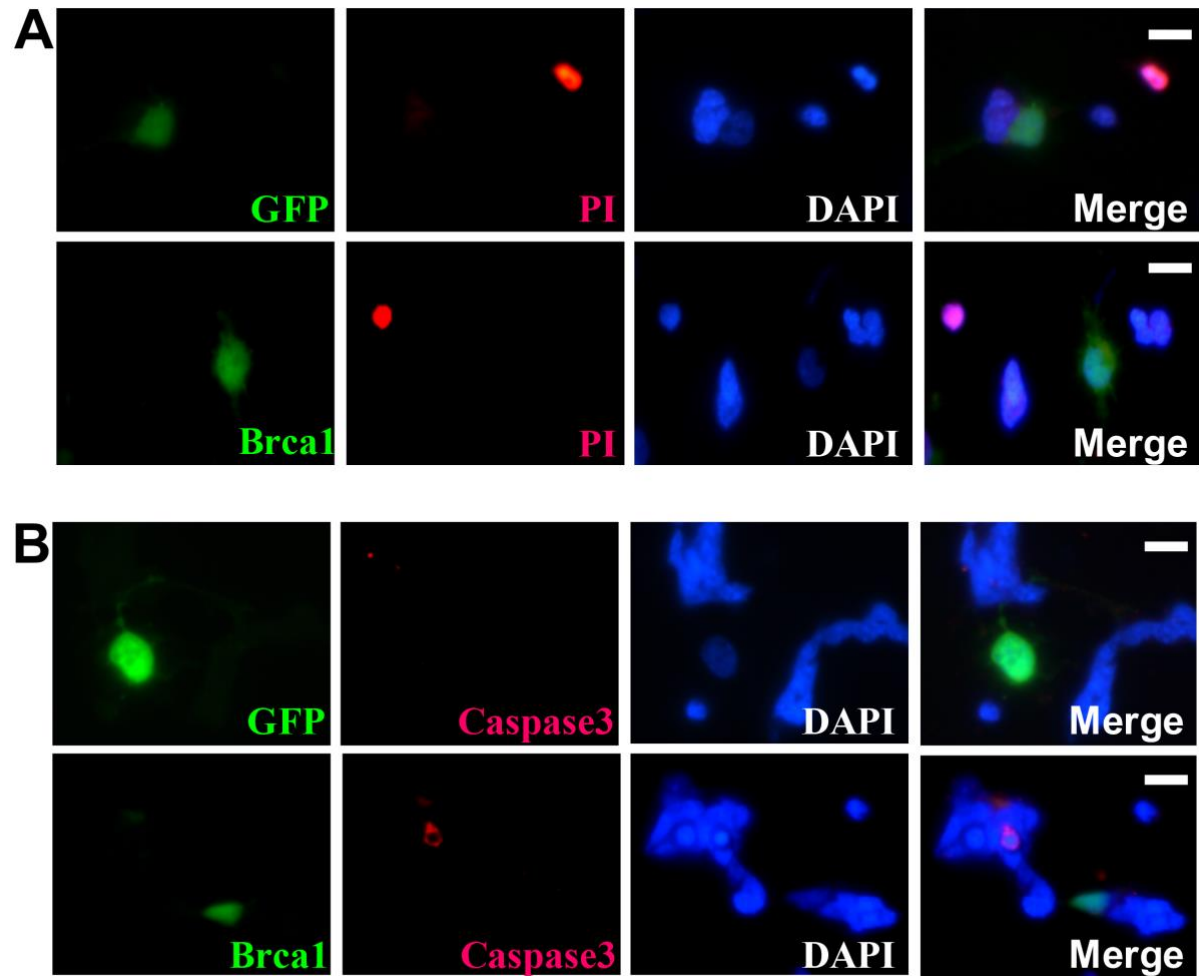
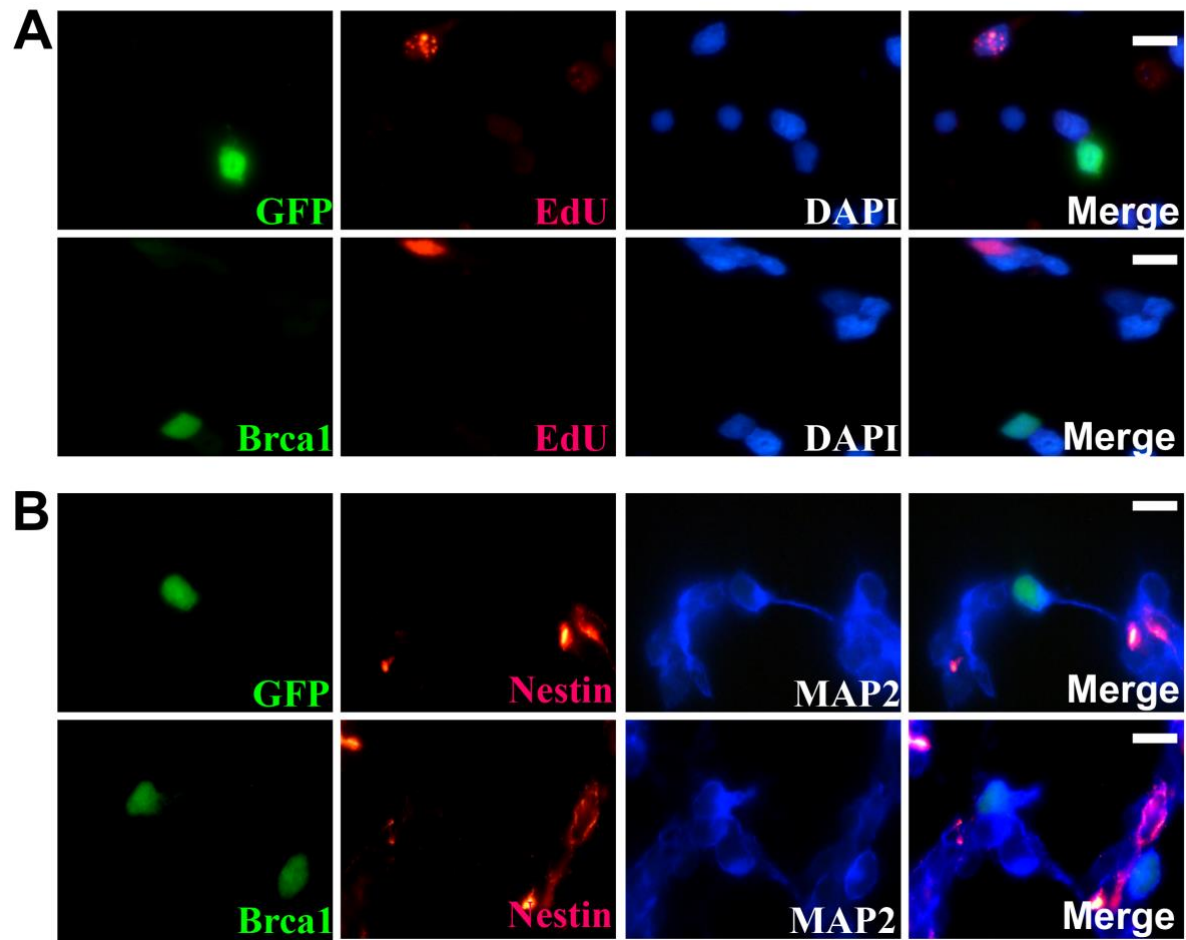


## Figure S1



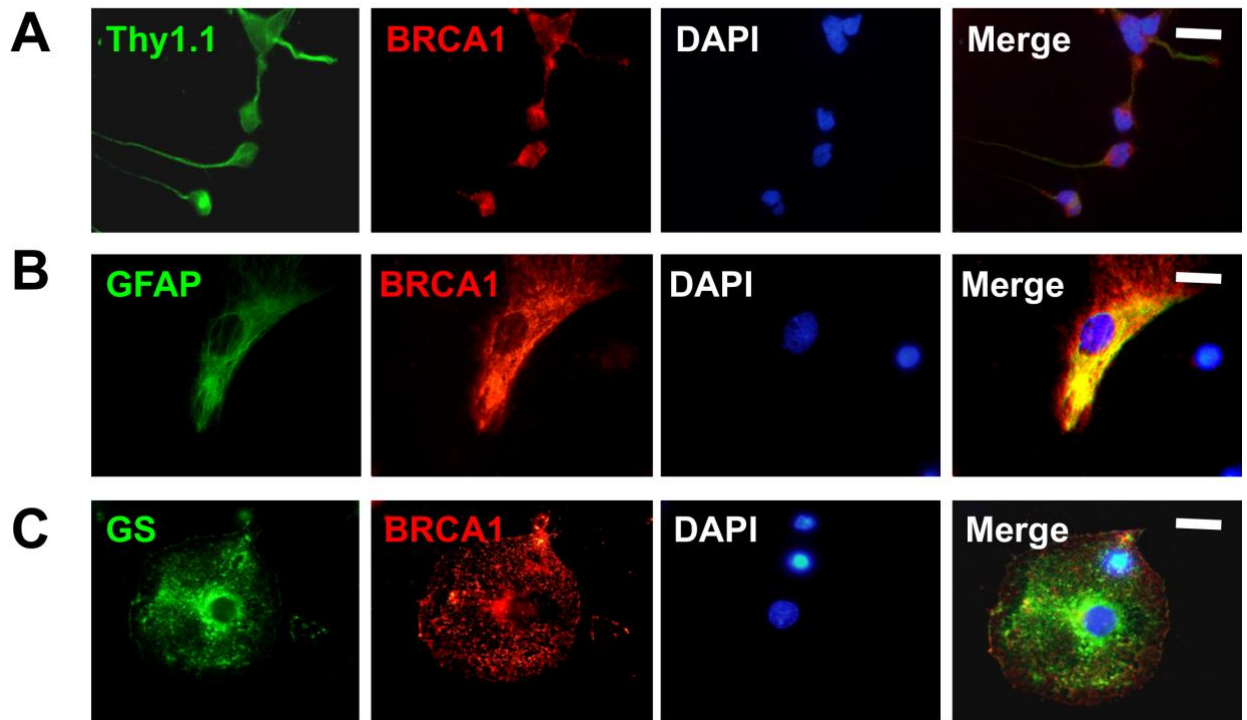
**Figure S1.** Individual exogenous Brca1 does not affect cell apoptosis in retinal neurons. The primary retinal neurons were transfected with vector pEPI-eGFP-N1 or pEPI-eGFP-Brca1. After 48 hours, cells were processed for immunofluorescence staining for PI (A) and Caspase3 (B). Immunofluorescence staining images indicate that GFP and Brca1-positive cells are both absent for PI and Caspase3. Scale bars: 20  $\mu$ m. (All data come from at least three separate experiments).

## Figure S2



**Figure S2.** Individual exogenous Brca1 does not affect cell proliferation in retinal neurons. Primary retinal neurons were transfected with vector pEPI-eGFP-N1 or pEPI-eGFP -Brca1. **A.** After 24 hours, cells were treated with 10 $\mu$ M EdU. 24 hours later after treatment, cells were fixed and stained with Apollo solution to detect EdU. EdU is not observed in Brca1-positive cells. **B.** Nestin-staining shows that neither GFP-positive cells nor Brca1-positive cells expresses Nestin. Scale bars: 20  $\mu$ m. (All data come from at least three separate experiments).

## Figure S3



**Figure S3.** Double staining was performed in SD postnatal 1-day retinal neurons. The nuclei of the cells were labeled with DAPI (blue). Brca1 (red) and Thy1.1 (A), GFAP (B), GS (C) (green). Double-staining shows that in the primary retinal cells, Brca1 is detected both in the cytoplasm and nuclei of Thy1.1-positive neurons, and detected in GS-positive müller cells and GFAP-positive glia cells. Scale bars: 20  $\mu$ m. (All data come from at least three separate experiments).