



Supplemental Figure S1. (A) Imaging strategy of hRGCs cultured with retinal explants. (B, C) Quantification of the number of DAPI+ cells, excluding cells in explants. (B) At 6 DIV, there is no difference in cell number with the presence of either neonatal or adult explants. (C) At either 7 or 14

DIV, supplementation with BDNF, Forskolin or the presence of adult mouse retina explants does not significantly alter the number of DAPI+ cells compared to hRGCs cultured alone. **(B)** hRGCs alone: N=4 coverslips, n= 4 2.9x2.9mm images, +Neonatal explants: N=6, n=3-5, +Adult explants: N=7, n=3.-5. **(C)** 7 DIV hRGCs alone: N=3 coverslips, n=3 2.9x2.9mm images, 7DIV + BDNF, forskolin: N=3, n=3, 7DIV + explants: N=4, n=3-4, 7DIV + explants + BDNF, forskolin: N=4, n=3-5, 14DIV hRGCs alone: N=4, n=3, 14DIV + BDNF, forskolin: N=4, n=3, 14DIV + explants: N=3, n=3-4, 14DIV + explants + BDNF, forskolin: N=4, n=3-6. Data are shown as mean \pm SEM, statistical significance was tested using an ordinary one-way ANOVA, Dunnett's post hoc test.