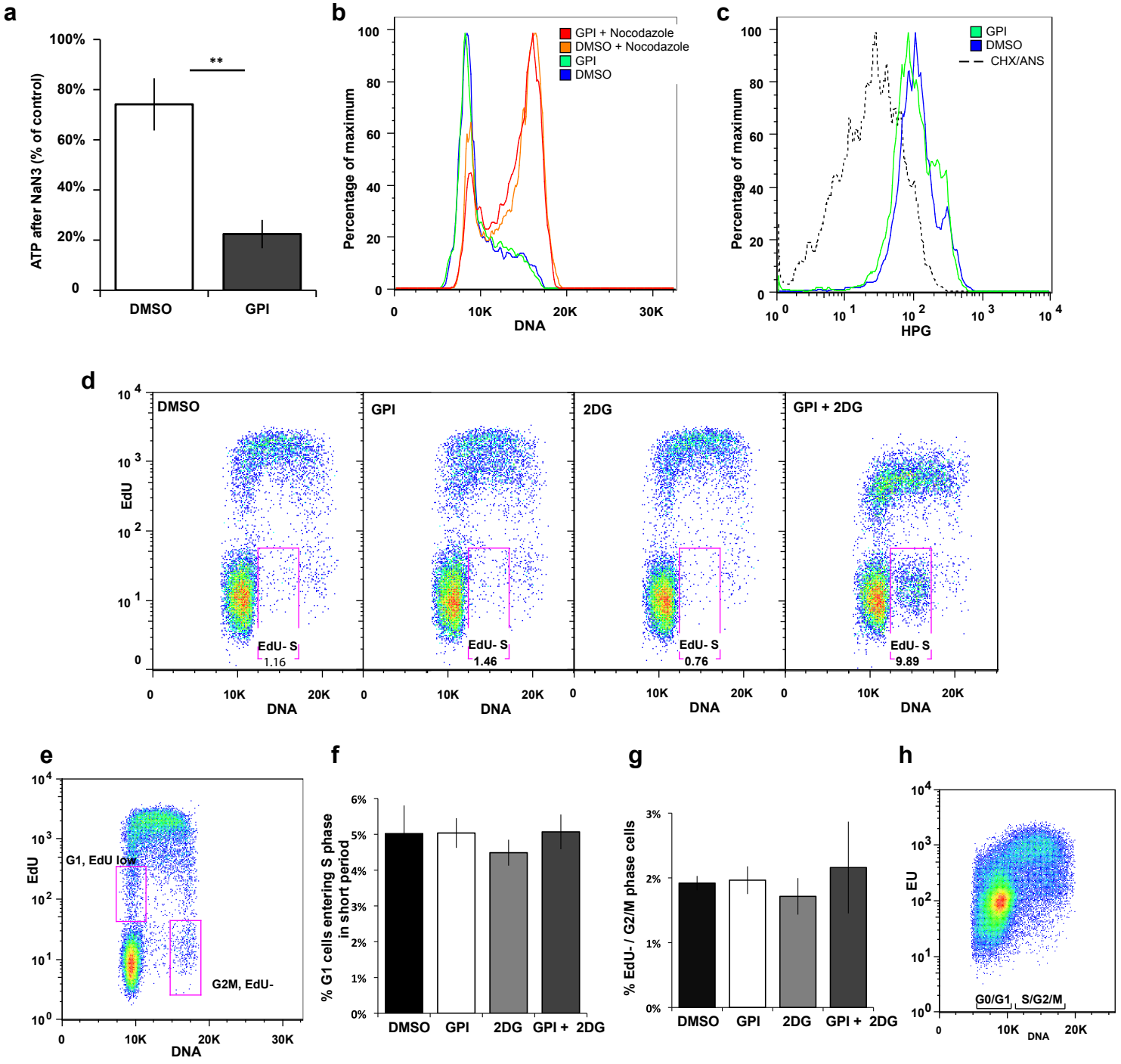
Supplementary Fig. 3



Supplementary Figure 3. Effects of GPI and 2DG on progenitor cell proliferation. **(a)** Retinal explants incubated with GPI in 1x MBS for 4-7 hours still require oxidative phosphorylation for their ATP (DMSO and GPI, n=15, p=10-7 for difference between DMSO and GPI). **(b)** Incubation of explants with GPI for 4-6 hours does not impede progression of cells through G1 and S phase and accumulation in G2/M during nocodazole block (GPI had no effect compared to control DMSO treatment in 4/4 experiments). **(c)** Incubation of explants with GPI for 8-10 hours does not change the rate of the methionine analogue HPG incorporation into protein. The dashed histogram shows the background levels of fluorescence when the protein synthesis inhibitors cycloheximide + anisomycin are used with HPG. Quantification is shown in Fig. 5j. **(d)** GPI + 2DG reduces or abolishes EdU incorporation in S phase cells (EdU negative/S phase cells shown in box), unlike either drug alone or controls. **(e)** Estimation of G1 and G2/M phase rates after a short (1-2 hour) EdU pulse: 'G1/EdU low' box includes cells that just entered S phase from G1 prior to fixation, therefore the proportion of these cells compared to all G1 cells is an indication of G1 length (a longer G1 should result in a smaller proportion). 'G2M/EdU-' box includes cells that have been in G2/M for the duration of the EdU pulse, therefore the higher the proportion, the longer G2/M should be. **(f)** No effect of GPI and/or 2DG on proportion of G1/EdU low : G1 cells, an indication of G1 rate (n=4). **(g)** No effect of GPI and/or 2DG on proportion of G2M/EdU negative cells, an indication of G2M rate (n=4). **(h)** At stage 25, EU incorporation in explants is higher in S/G2M phase cells compared to G1.