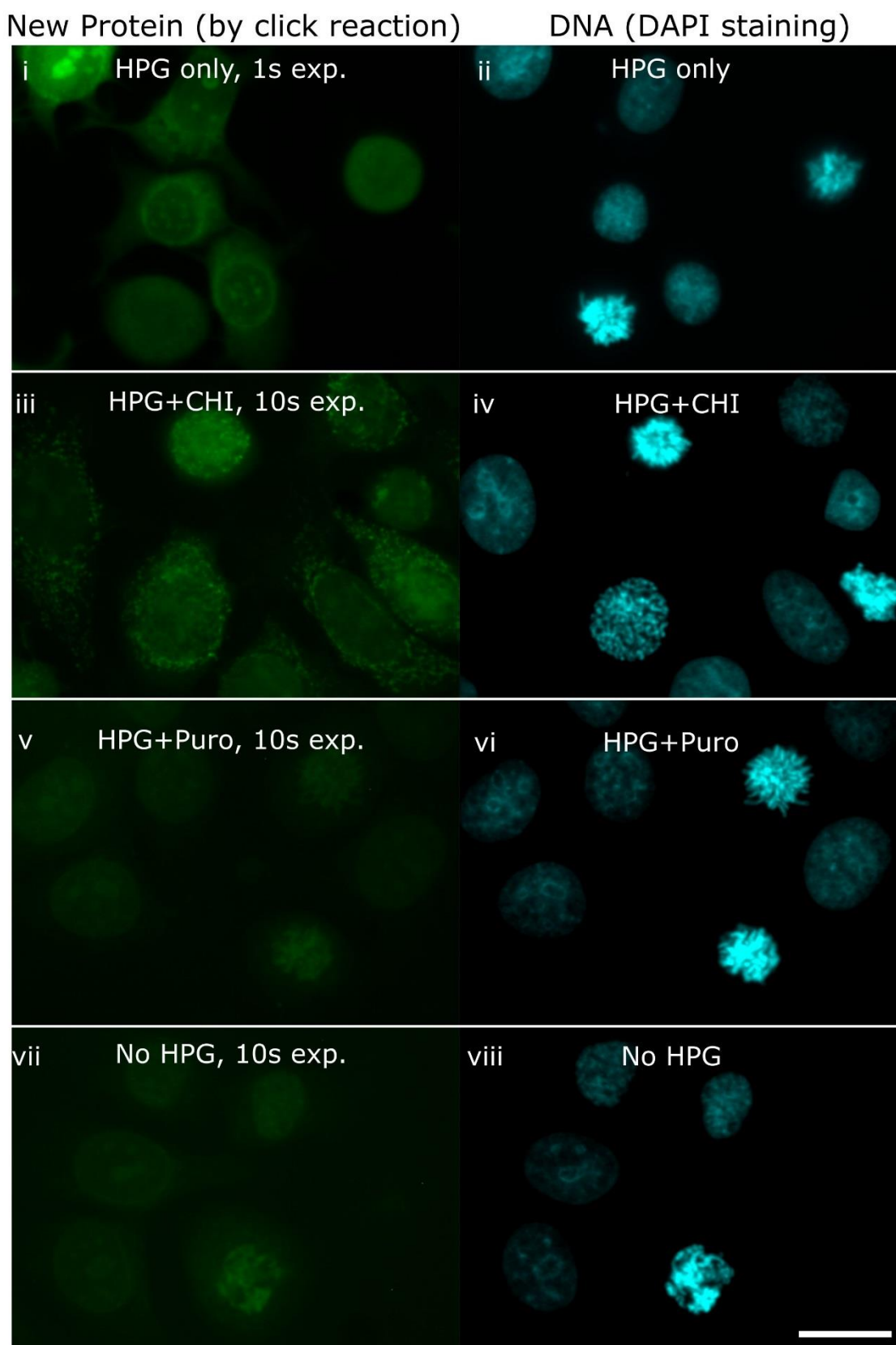


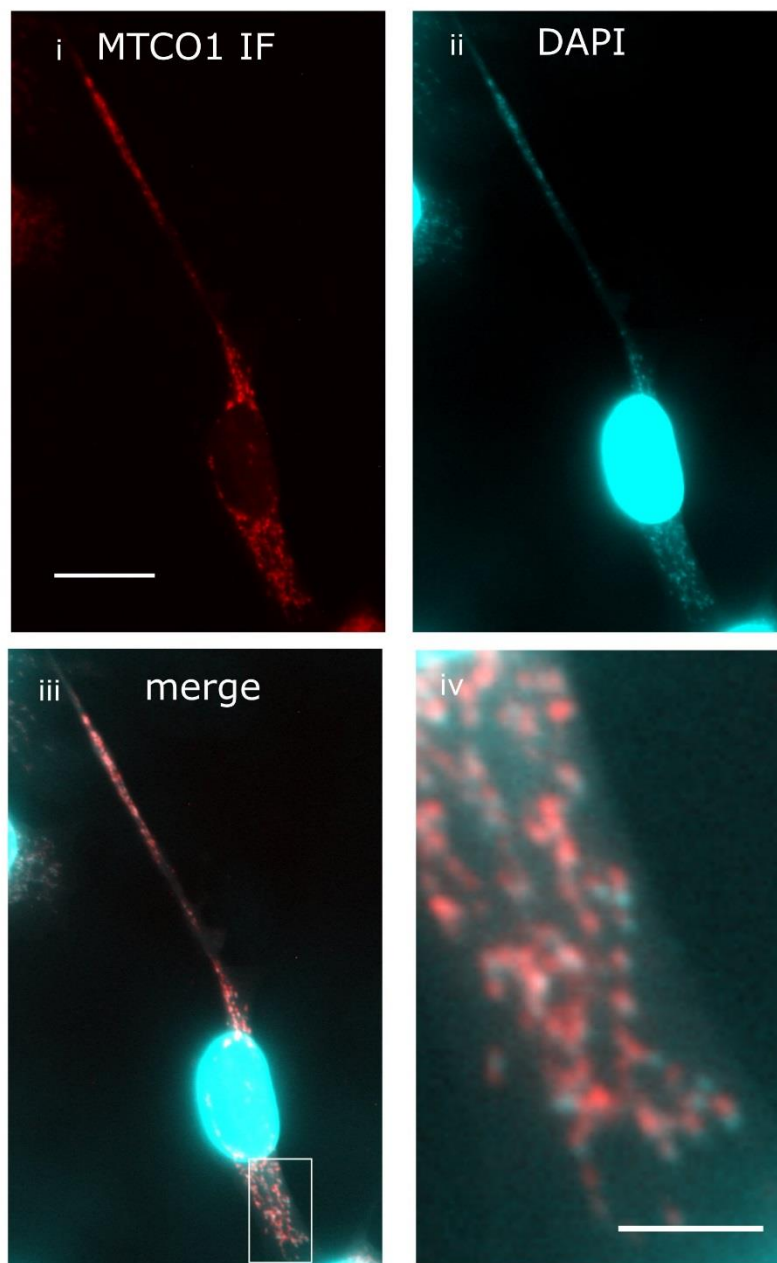
**Supplementary Figure 1 Protein synthesis in Eph4 cells with or without cycloheximide.**

Eph4 cells were labelled with HPG in the presence or absence of cycloheximide and alkyne-labelled proteins detected by epifluorescence microscopy after a “click” reaction on fixed cells with a fluorescent azide. 200 ms exposures of cells treated with HPG (i,ii); 5 s exposures of cells treated with HPG and puromycin (iii,iv); 5 s exposures of cells treated with HPG and cycloheximide (v,vi); 5 s exposures of cells without HPG (vii, viii). Images with same exposure times displayed with identical brightness and contrast settings; mitotic cells in i,ii,v and vi are encircled by dashed lines. Scale bar: 20  $\mu\text{m}$ .



**Supplementary Figure 2 Protein synthesis in MCF-7 cells.** MCF-7 cells were labelled with HPG (i, ii), HPG+cycloheximide (iii,iv), HPG + puromycin (v,vi) or without HPG (vii, viii) and alkyne-labelled proteins detected by epifluorescence microscopy after a “click” reaction on fixed cells with a fluorescent azide. Exposure times for click imaging were 1 s (i) or 10 s (iii, v, vii). Images with same exposure times displayed with identical brightness and contrast settings scale bar: 20  $\mu$ m.

### Colocalisation of DAPI staining with MT-CO1



**Supplementary Figure 3: Co-localisation of MT-CO1 cytoplasmic DNA in C2C12 cells.** MT-CO1 protein was detected by immunofluorescence (i), DNA by DAPI staining (ii). DAPI exposure was for 1 s. Merged images (iii,iv) show co-localisation. Scale bars are 20  $\mu\text{m}$  (i-iii) and 5  $\mu\text{m}$  (iv).