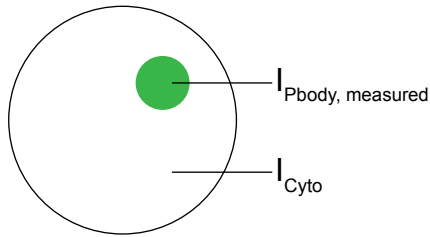
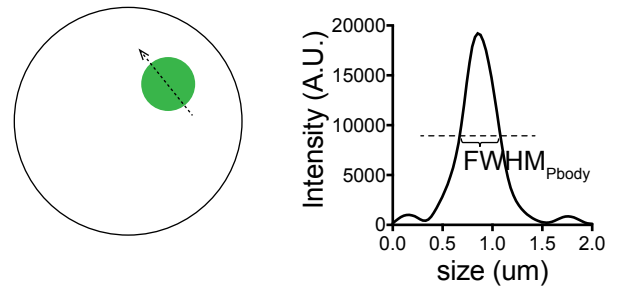


# Figure 1 - figure supplement 2

## A Measure P body intensity and cytoplasm intensity



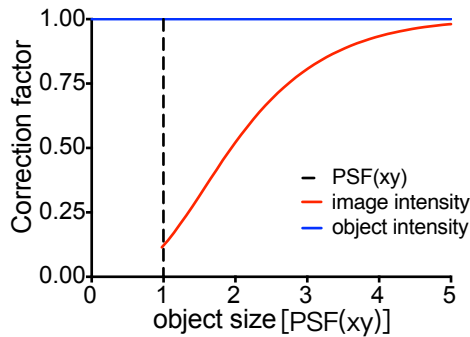
## B Measure P body size as FWHM



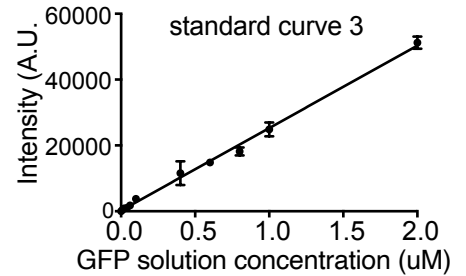
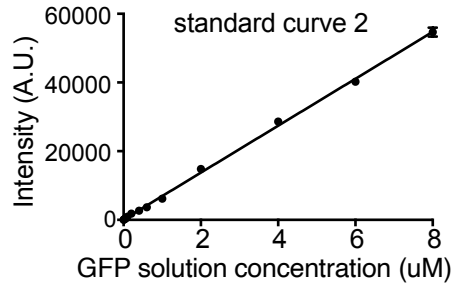
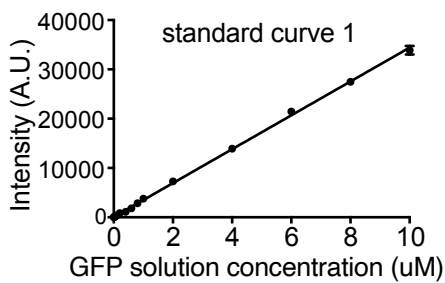
## C Calculate correction factor and real P body intensity

$$\text{object size} = \frac{\text{FWHM}_{Pbody}}{\text{PSF}(xy)}$$

$$I_{Pbody} = \frac{I_{Pbody, \text{measured}} - I_{cyto}}{CF} + I_{cyto}$$



## D Convert intensity to concentration using GFP standard curves.



## E Calculate Partition coefficient

$$\text{Partition coefficient} = \frac{\text{Concentration}_{Pbody}}{\text{Concentration}_{cyto}}$$

## Figure 1 – figure supplement 2. Quantifications of protein concentrations using fluorescence intensities.

(A) Measure maximum intensity of P body and average intensity of cytoplasm.

(B) Measure size of P body by drawing a line across the P body and measure the full width at half maximum intensity (FWHM).

(C) The correction curve relates size of P body to the fraction of true maximum intensity measured in the image as indicated by the red line.

(D) Three standard curves generated by different concentrations of GFP solutions correspond to three different imaging settings.

(E) Partition coefficient is the ratio of P body concentration to cytoplasm concentration.