



### Additional file 1 Analysis of GFP fluorescence in BY-2 protoplasts.

Changes in GFP fluorescence in protoplasts isolated from BY-2 suspension cultures were monitored by flow cytometry: (A) a selection of living protoplasts was based on the forward and side scatter signals; Flow-cytometry histograms show distribution of fluorescence intensity in (B) wt BY-2 cells and (C) analysed transgenic lines (8, 19 and 35) before and during the treatment with  $\beta$ -estradiol (+ESTR) or DMSO (control); (D) the colour code for the histograms and the table of mean GFP fluorescence intensities during the treatment.