Fig. 1 Suppl. Cell length data distribution. A - control BY-2 stationary cells; B - Transgenic BY-2 cells with increased elongation resulting from overexpression of \textit{NtHyPRP1} (from Dvorakova \textit{et al.} 2012).

Fig. 2 Suppl. Variation of cell length within the whole cell population (solid black columns) and average variation of cells within individual cell files. The values are demonstrated for the wild type BY-2, and cell lines overexpressing GFP or modified \textit{NtHyPRP1}; according to Dvorakova \textit{et al.} (2012).
Fig. 3 Suppl. Cell density measurement. A - Box plots of density data obtained from four types of counting chambers: Fuchs-Rosenthal (recommended), Bürker, Neubauer, and Thoma. B - Box plots of density data obtained using the Fuchs-Rosenthal chamber and four different types of cell suspension treatment: Hoechst staining a diluted culture as recommended, Hoechst staining an undiluted (5 times denser) sample, HCrO₄⁻ treatment of diluted cells, HCrO₄⁻ treatment of an undiluted (5 times denser) sample.

Fig. 4 Suppl. Estimation of nuclear DNA content. Flow-cytometry comparison of DNA content in tobacco BY-2 cells (BY-2) and tobacco (Nicotiana tabacum cv. Samsun) leaf cells (NT). Standardized to nuclei of Solanum pseudocapsicum (SP). G₁ and G₂ - respective phases of the cell cycle.
Fig. 5 Suppl. Cell lengths and callus diameters in different cell lines. Dotted columns indicate the average cell length, solid black columns indicate the average diameter of calli of each cell line. Letters above the columns indicate statistical significance of observed differences among cell lines: the cell line overexpressing GFP, and four lines expressing genes encoding cell-wall proteins ST7 (two lines), NtHyPRP, and modified NtHyPRP1 (two lines) according to Dvorakova et al. (2012).