Supplementary Information to

Broad lipid phase transitions in mammalian cell membranes measured by Laurdan fluorescence spectroscopy

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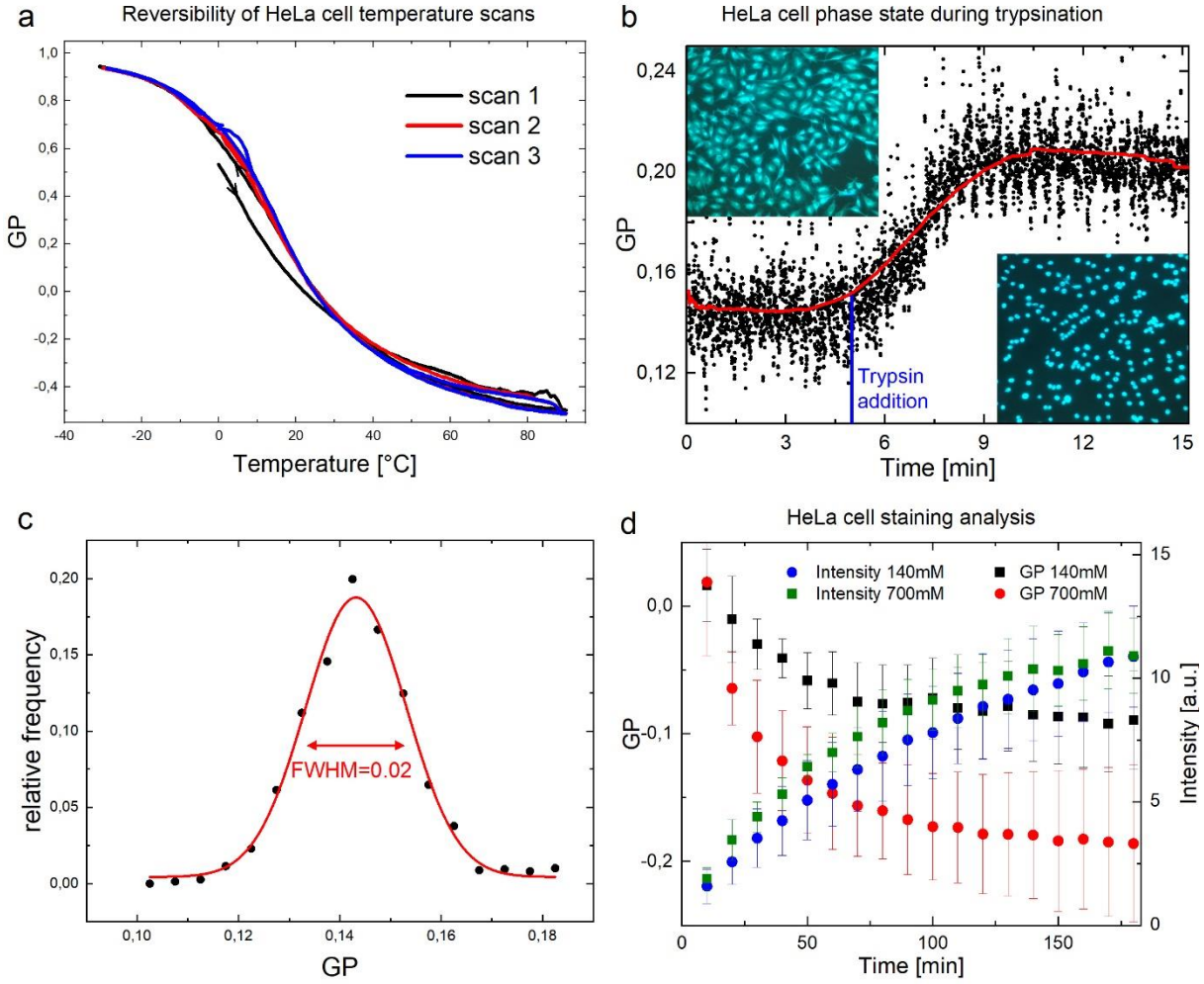

Figure S1 Reversibility of temperature scans and phase state changes due to trypsination, Laurdan staining and cholesterol depletion. a Multiple temperature scans (1 data point/K) of GP values of one HeLa cell sample. After the first upscan the GP curves stays reversible. For data analysis the mean values of the first down scans of three independent samples is evaluated. **b** GP as a function of time at room temperature after trypsin addition at 5min. Spectra were recorded by attaching the spectrometer to a fluorescence microscope. Each datapoint represents a GP value calculated by analysing emission spectra originating from a picture containing about 100 HeLa cells. The red line shows the smoothed data after applying a moving average filter of 1300pt width. Two microscopy images show the cell morphology before and after trypsination (field of view about 420 x 320 µm²). **c** GP distribution of adherent HeLa cells (histogram of data in B before trypsin addition) at room temperature. The full width half maximum of pictures containing about 100 HeLa cells is about 0.02. **d** Fluorescence intensity and GP of HeLa cells as a function of time during the staining process with the same amount of Laurdan but at two different DMSO concentrations.