Role of water in chromosome spreading and swelling induced by acetic acid treatment: a FTIR spectroscopy study

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Supplementary Figures

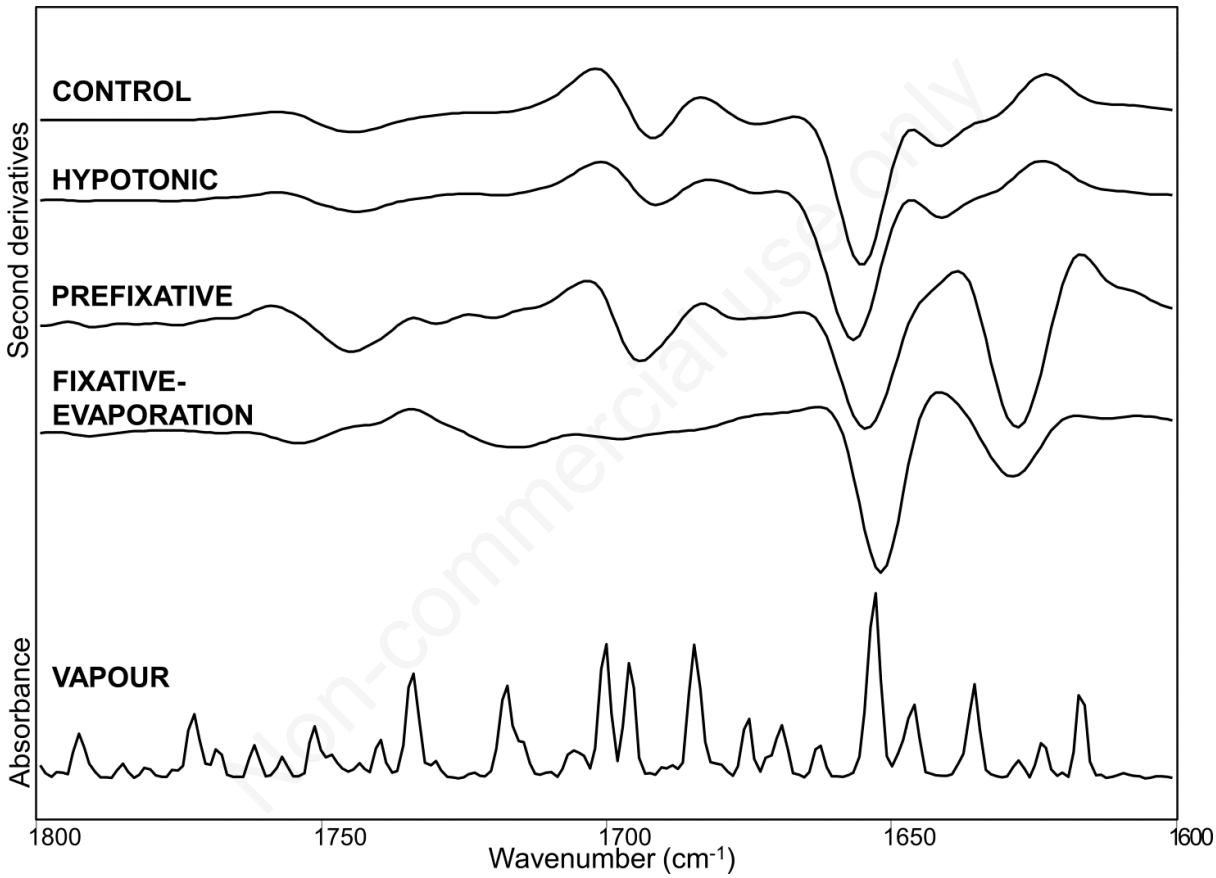

Figure 1. FTIR second derivative spectra of intact lymphocytes (control), and at each stage of the procedure for chromosome preparation are shown between 1800 and 1600 cm^{-1}, after normalization at the tyrosine peak around 1515 cm^{-1}. The absorption spectrum of vapour is also reported to evaluate possible residual vapour interference.

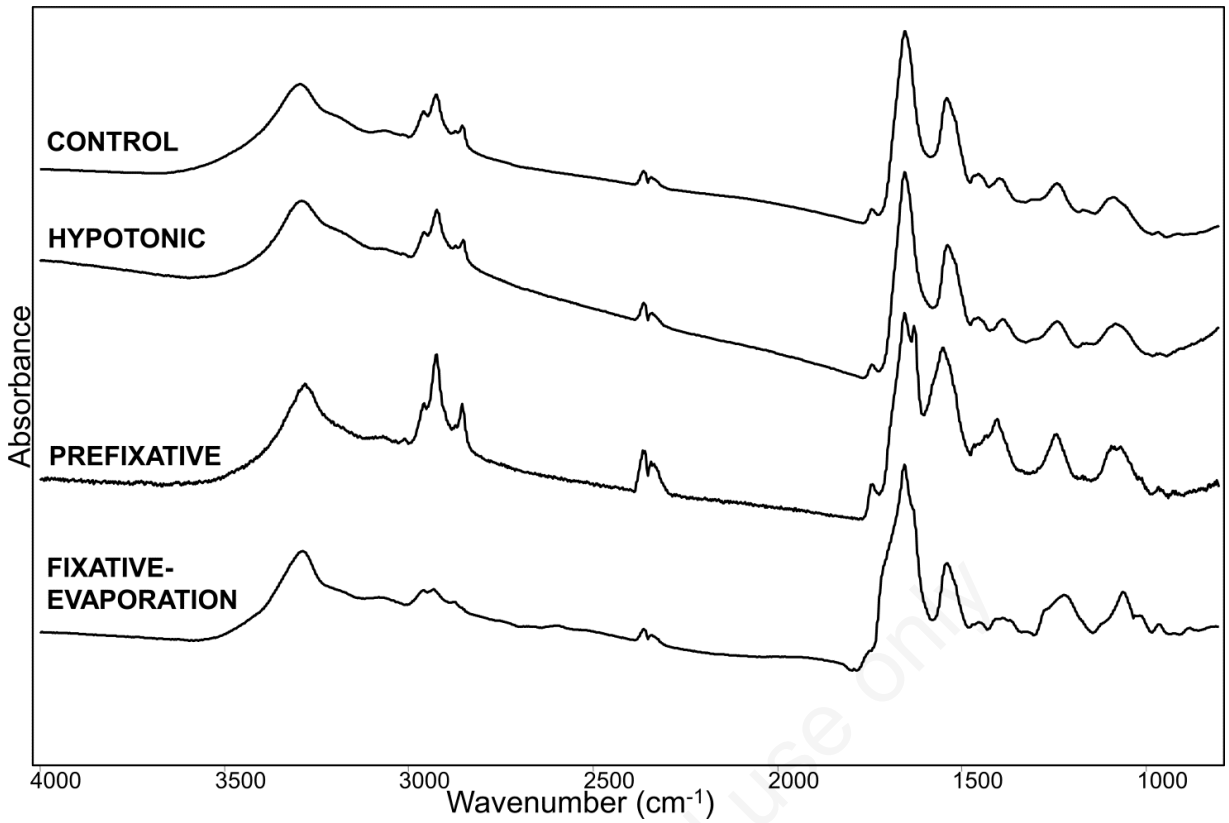

Figure 2. Raw FTIR absorption spectra of control cultured lymphocytes, and at each stage of chromosome preparation. The spectra are reported without any corrections, in particular they are displayed before the Mie scattering correction.

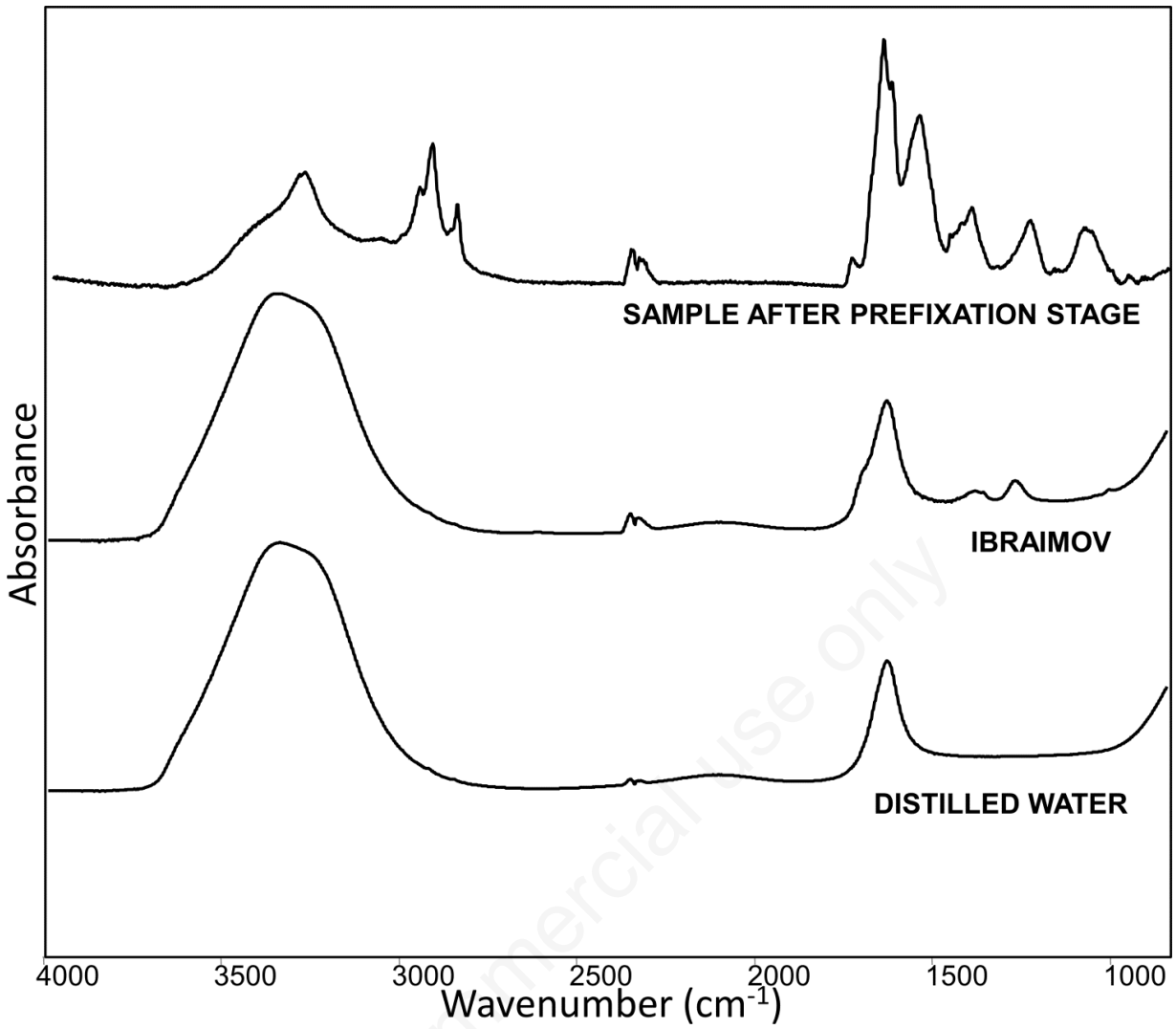

Figure 3. The FTIR absorption spectrum of the sample after the last prefixation stage is compared with the spectrum of Ibraimov and with that of distilled water, to evaluate a possible interference of Ibraimov solution in the sample spectrum.

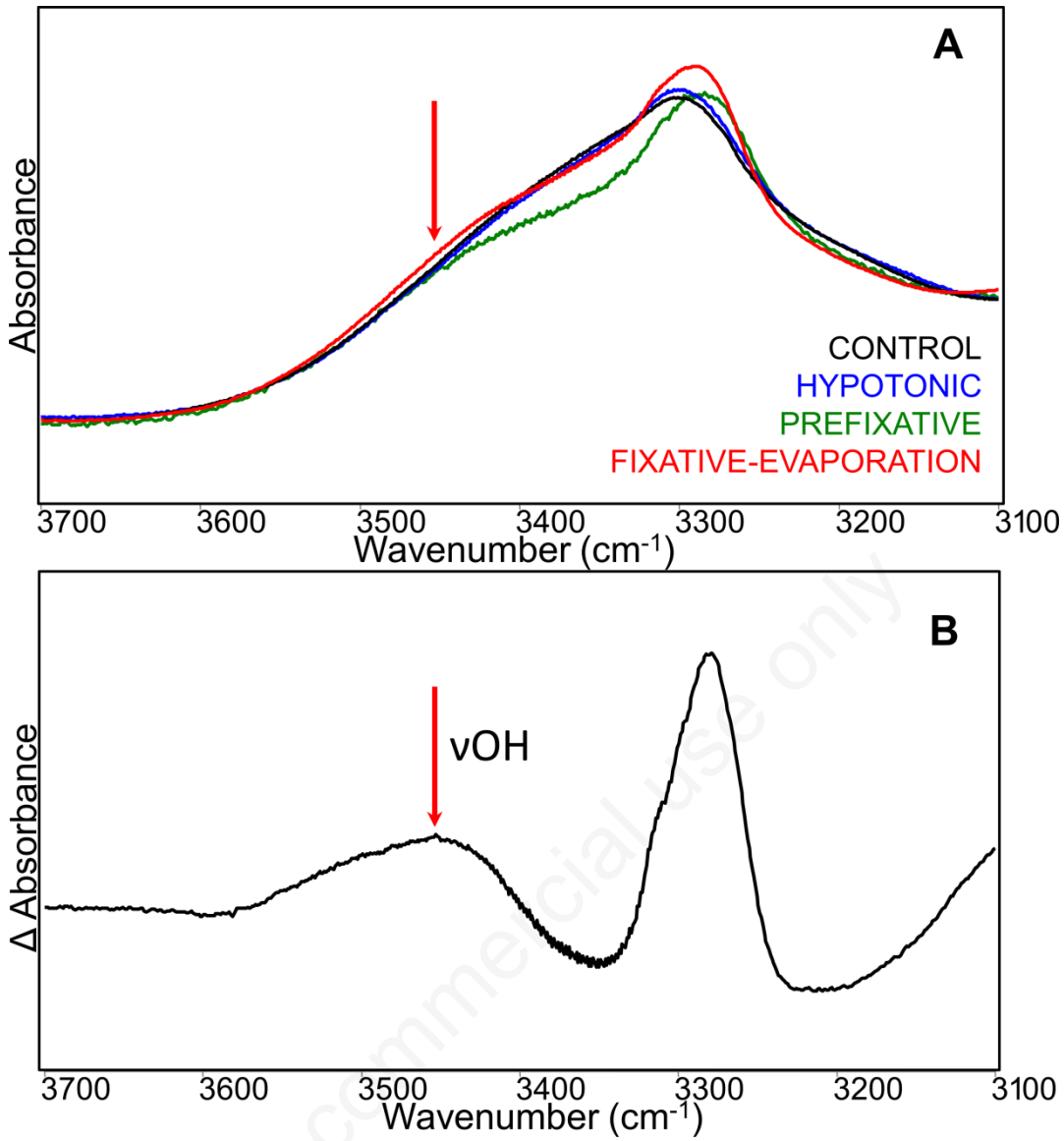

Figure 4. FTIR absorption spectra of samples before and at each stage of the chromosome preparation procedure in the water OH stretching region (A). The difference spectrum obtained subtracting the spectrum of the control to that of the last fixative evaporation stage is also reported in B.