

FTIR imaging of the 3D extracellular matrix used to grow colonies of breast cancer cell lines

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Supplementary Materials

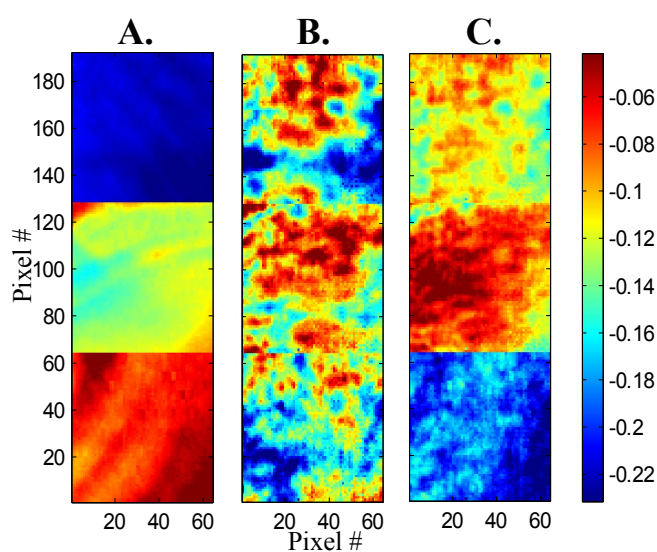


Figure S1: analysis of 3 samples of pure Matrigel which have been FFPE processed. A. absorbance at 1654 cm^{-1} , B. score of the spectra on the 4th PC computed between 1800 and 1000 cm^{-1} on all the spectra of this image, C. score of the spectra on the 4th PC computed between 1800 and 1000 cm^{-1} on the spectra presented in figure 2C., i.e. curve a. in Figure 2E. The color bar scale refers to C. The corresponding absorbance scale is 0.15 to 0.60 for A and 0 to 0.12 for B.

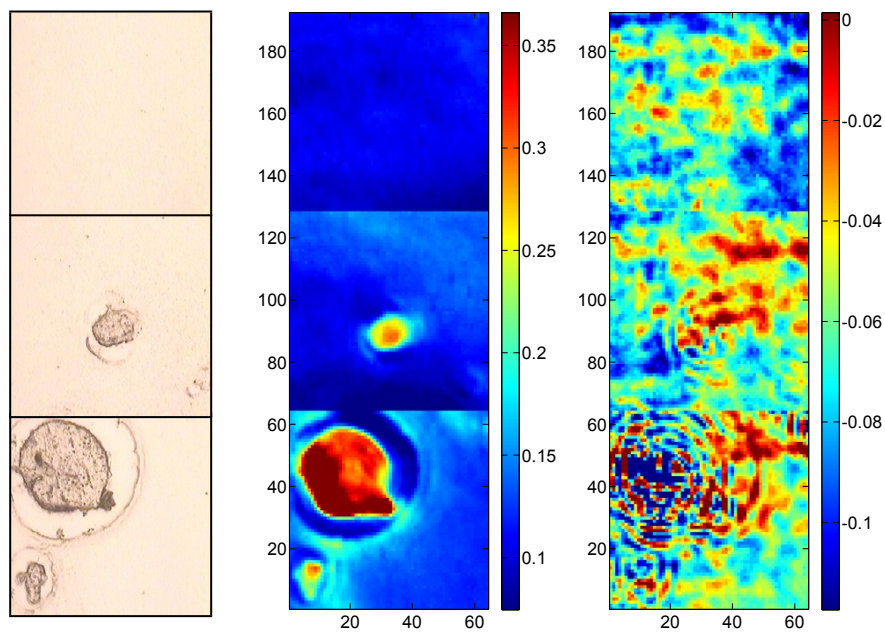
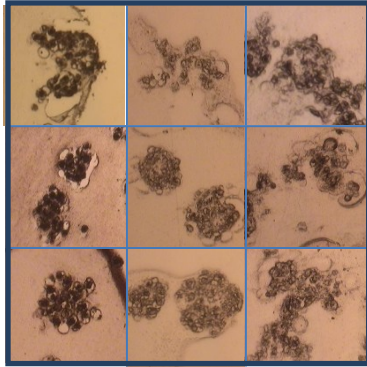
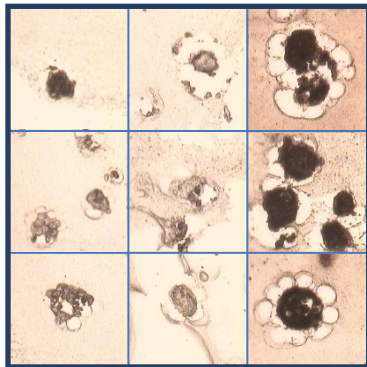


Figure S2: Analysis of three images corresponding to three different areas of the same FFPE-processed 3D culture of MCF-7 cells grown in Matrigel for 10 days. The three images (12,288 spectra) have been merged in a single dataset and analyzed together. **A.** bright field view, **B.** Absorbance at 1654 cm^{-1} . **C.** Scores of the spectra on the 4th principal component ($1800\text{-}1000\text{ cm}^{-1}$ interval). No processing was applied.

MDA-MB-231



T-47D



SK-BR-3

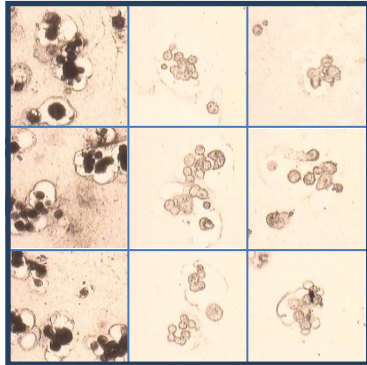


Figure S3: bright field images of the samples presented in Figure 2

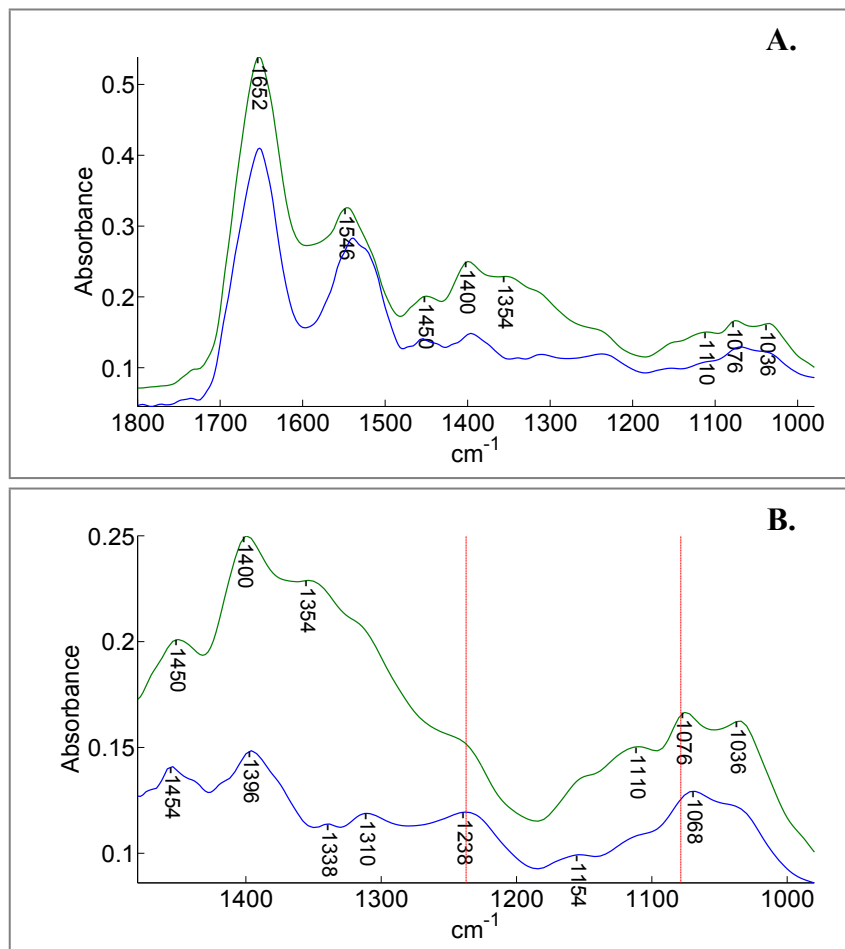


Figure S4: **A.** Mean spectrum of a FTIR image (4,096 spectra) of untreated and dried pure Matrigel (trace in green) and mean spectrum of a FTIR image (4,096 spectra) of FFPE-processed pure Matrigel (trace in blue) represented between 1800-1000 cm^{-1} and **B.** 1500-1000 cm^{-1} . The red vertical lines indicate the two bands discussed in the text. No processing was applied.