

Supplementary Information for

Synchrotron FTIR micro-spectroscopy for structural analysis of Lewy bodies in the brain of Parkinson's disease patients

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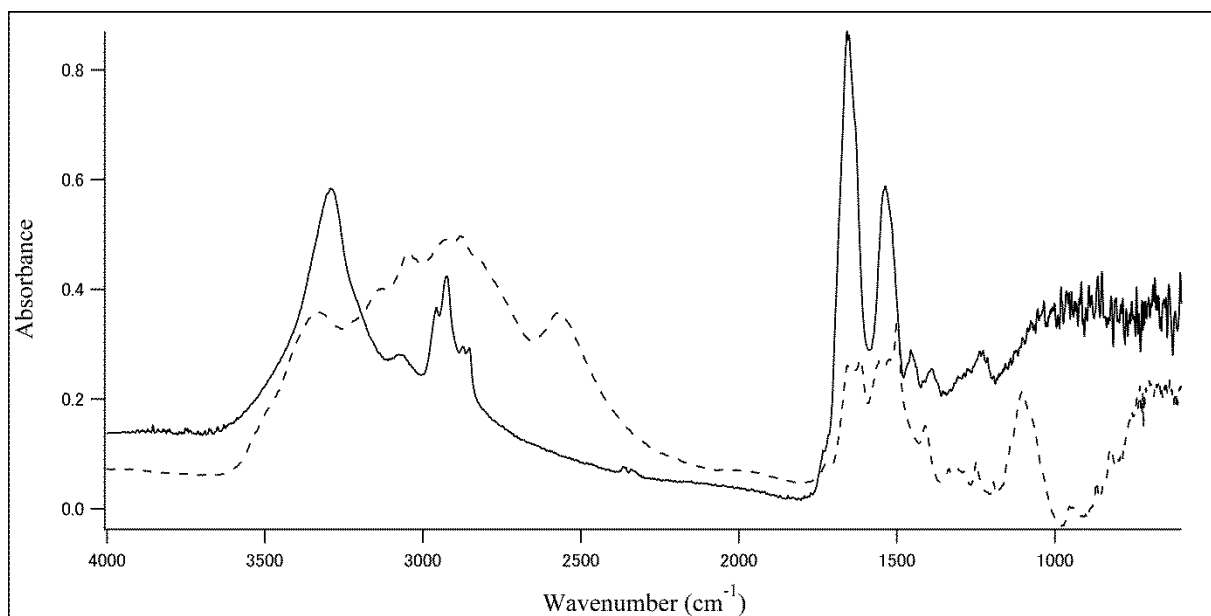
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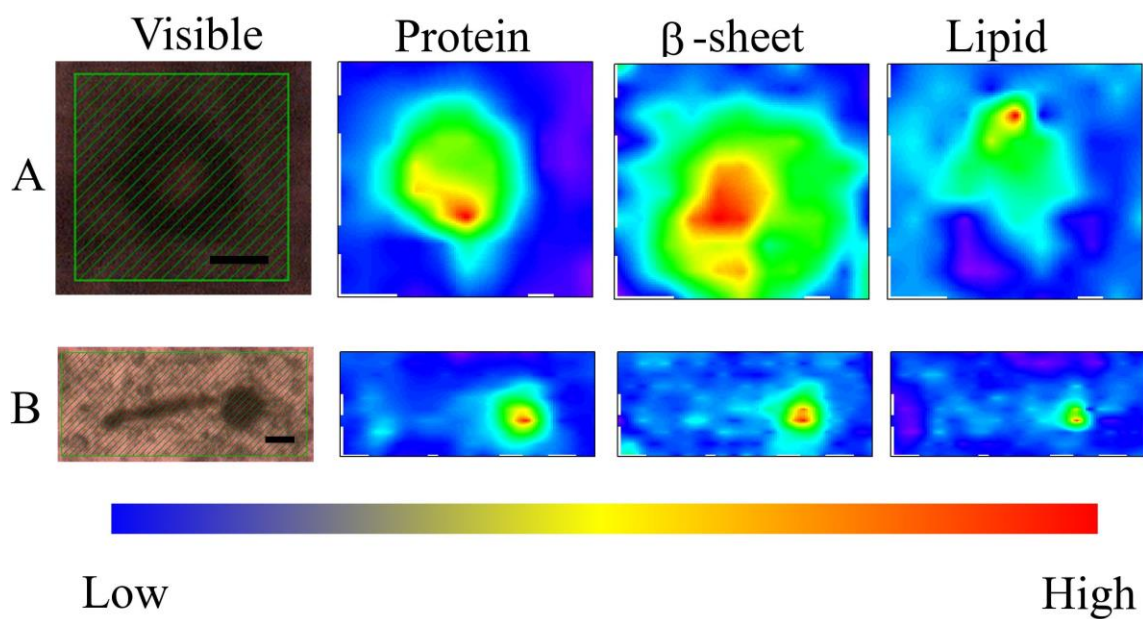
Supplementary Figure S1

FTIRM spectra for the halo of LBs (solid line) and the primary and secondary antibody with DAB (dye, dashed line): The unique peaks of dye, such as 1100 cm^{-1} and 2570 cm^{-1} , are not seen in the spectrum for the halo of LBs.



Supplementary Figure S2

Visible and FTIR images of atypical LBs in the substantia nigra of the midbrain derived from the PD patient. We have measured a total of 20 pieces of LBs with FTIRM. Five (42 %) in the well-prepared 12 mapping images showed that the content of β -sheet was not high in the halo. (A) 4- μm step, 11×10 pixels = $44 \times 40 \mu\text{m}^2$. (B) 4- μm step, 23×10 pixels = $92 \times 40 \mu\text{m}^2$. Scale bar, 10 μm .



Supplementary Figure S3

Electron microscopic image of α -syn fibrils. Scale bar, 300 nm.

