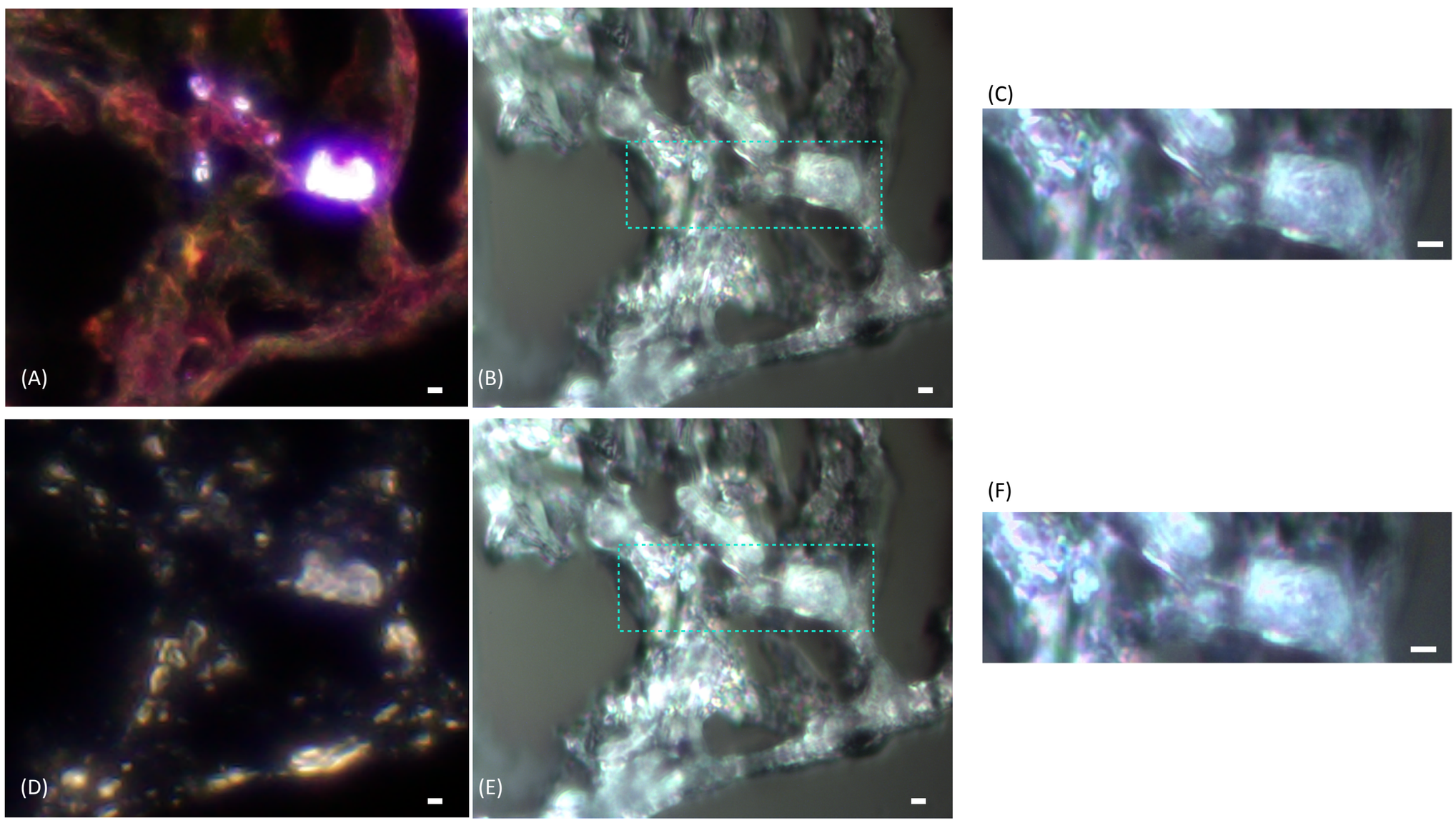
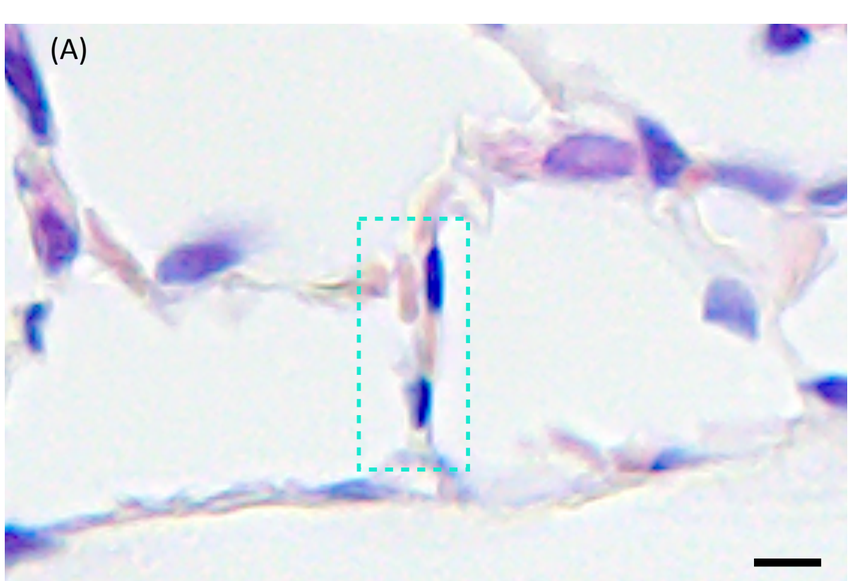
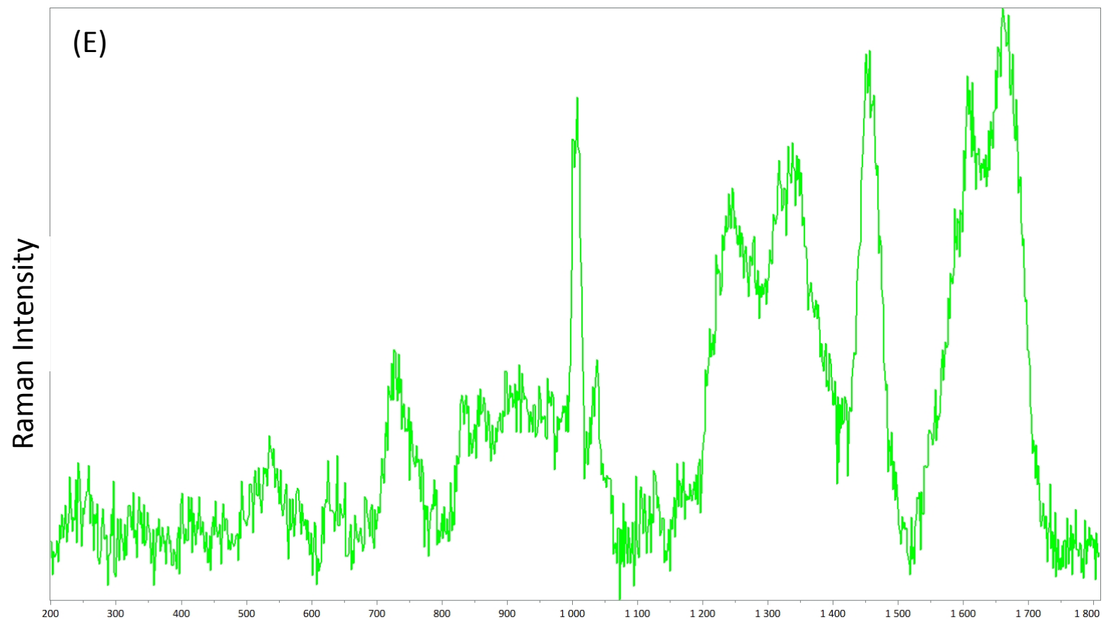
Electronic Supplementary Material (ESI) for Analyst.



Supplemental Figure 1. Comparison of mouse tissue and TiO_2 condition between before (A, B, C) and after (D, E, F) Raman spectroscopic measurement.
(A) HE-stained tissue image taken by dark-field microscopy. (B) Decolorized tissue image taken by Raman microscopy at the same point as A. (C) Enlarged view of the blue dot square in B.(D) Decolorized tissue image taken by dark-field microscopy at the same point as A. (E) Image at the same point as B after Raman spectroscopic measurement. (F) Enlarged view of the blue dot square in E. Bar =2 µm, TiO_2: titanium dioxide, HE: hematoxylin and eosin





Supplemental Figure 2. Representative data of Raman spectroscopic image of mouse tissue without TiO_2 exposure (PBS control).
(A) HE-stained tissue image taken by bright-field microscopy. Bar = 4 μm. (B) Enlarged view of the blue dot square in A. Bar =1 μm. (C) Decolorized tissue image taken by Raman microscopy at the same point as B. Bar =1 μm. (D) The CLS-processed image of the area viewed in C. Green area means cell-derived signal. Bar =1 μm. (E) Spectra used for CLS processing.
TiO_2: titanium dioxide, HE: hematoxylin and eosin, CLS: classical least squares