Electronic Supplementary Information

Raman tweezers microspectroscopy of *circa* 100-nm extracellular vesicles

Sergei G. Kruglik\textsuperscript{a}, Felix Royo\textsuperscript{b}, Jean-Michel Guigner\textsuperscript{d}, Laura Palomo\textsuperscript{b,c}, Olivier Seksek\textsuperscript{e}, Pierre-Yves Turpin\textsuperscript{f}, Irene Tatischeff\textsuperscript{g} and Juan M. Falcon-Perez\textsuperscript{b,c}

*Corresponding author: sergei.kruglik@upmc.fr

\textsuperscript{a} Laboratoire Jean Perrin, Sorbonne Université, CNRS UMR 8237, 4 place Jussieu, Paris, 75005, France.
\textsuperscript{b} CIC bioGUNE, CIBER ehd Bizkaia Science and Technology Park, Derio (Bizkaia), 48160, Spain.
\textsuperscript{c} IKERBASQUE, Basque Foundation for Science, Bilbao (Bizkaia), 48013, Spain.
\textsuperscript{d} IMPMC, Sorbonne Université, CNRS UMR 7590, IRD, MNHN, Paris, 75005, France.
\textsuperscript{e} IMNC, Université Paris Sud, CNRS UMR 8165, Orsay, 91405, France.
\textsuperscript{f} UR6 Enzymologie de l’ARN, Sorbonne Université, Paris, 75005, France.
\textsuperscript{g} RevInterCell, 49T rue François Leroux, Orsay, 91400, France.
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Figure S11. Raman spectra corresponding to the sets (IV, red curve) and (X, yellow curve) in Figure 4B, and their (1:1) difference spectrum (blue curve). The difference spectrum exhibits one pronounced positive peak at 1004 cm$^{-1}$ due to protein’s Phe band and two pronounced negative peaks, at 1065 and 1298 cm$^{-1}$ due to lipids acyl chain vibrations. These peaks are marked by dashed vertical lines.
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### Table S1. Major marker Raman bands for biomolecular components analysis

<table>
<thead>
<tr>
<th>Biomolecule</th>
<th>Frequency range (cm(^{-1}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nucleic acids</td>
<td>782 – 788</td>
</tr>
<tr>
<td>Nucleic acid: A-type helix</td>
<td>810 – 812</td>
</tr>
<tr>
<td>Nucleic acid: B-type helix</td>
<td>830 – 840 (shoulder)</td>
</tr>
<tr>
<td>Carotenoids</td>
<td>1515 – 1540</td>
</tr>
<tr>
<td>Lipids</td>
<td>1050 – 1130, 1720 – 1750</td>
</tr>
<tr>
<td>Lipids: Cholesterol</td>
<td>700 – 704</td>
</tr>
<tr>
<td>Lipids: (\nu)(C-N(^+)) of polar head</td>
<td>717</td>
</tr>
<tr>
<td>Lipids: Ergosterol</td>
<td>1602 – 1604</td>
</tr>
<tr>
<td>Proteins: Phenylalanine</td>
<td>1003 – 1004</td>
</tr>
<tr>
<td>Proteins: Tyrosine</td>
<td>643 – 645</td>
</tr>
<tr>
<td>Proteins: Tryptophan</td>
<td>758 – 759, 1012</td>
</tr>
</tbody>
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