

## Supplementary Information

### Investigation of Mammalian Cells Expressing SARS-CoV-2 Proteins by Surface-Enhanced Raman Scattering and Multivariate Analysis

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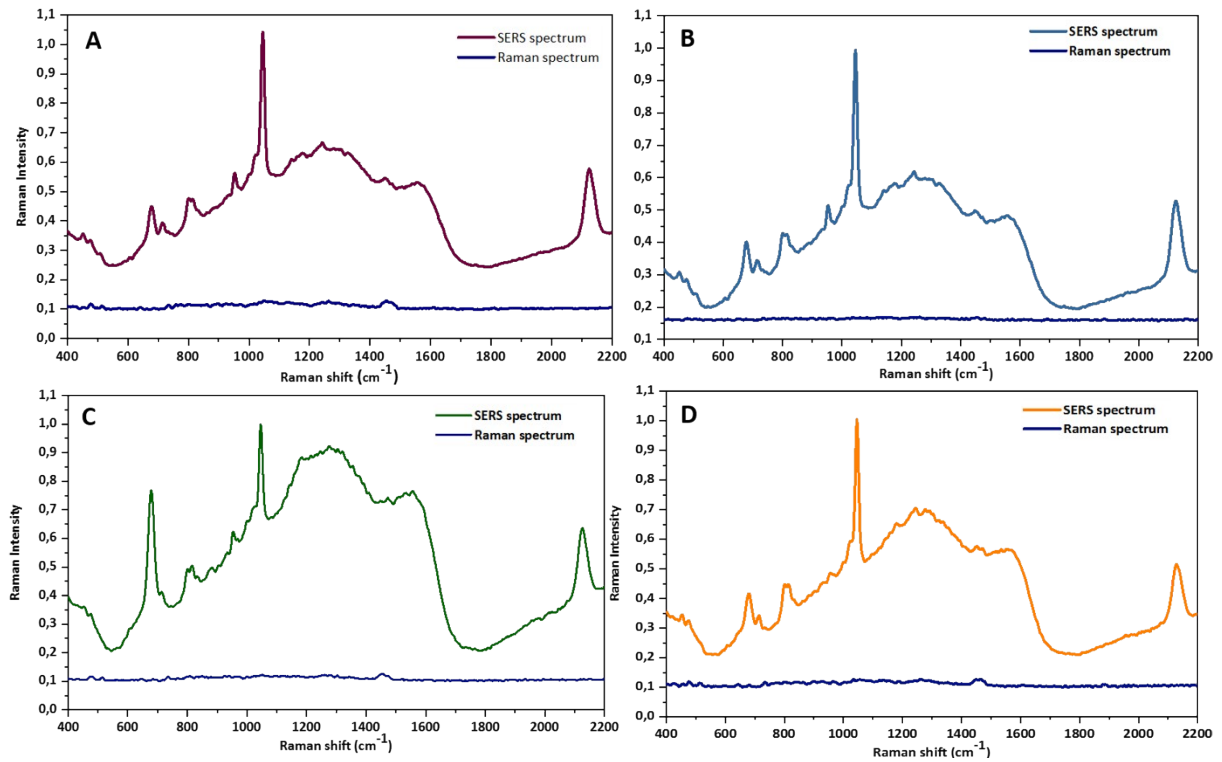
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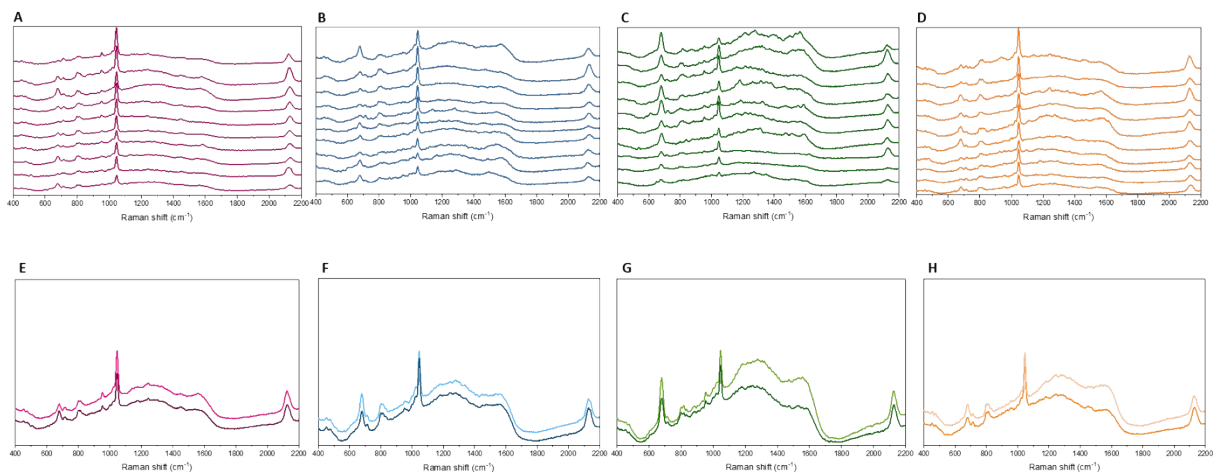
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**Figure S1.** Comparison of Raman and SERS spectra of proteins. **A)** protein of control cells, **B)** protein of M plasmid transfected cells, **C)** protein of N plasmid transfected cells and **D)** protein of E plasmid transfected cells



**Figure S2.** **A)** Ten spot-to-spot measurements of control cells, **B)** ten spot-to-spot measurements of proteins M plasmid transfected cells, **C)** ten spot-to-spot measurements of proteins N plasmid transfected cells, **D)** ten spot-to-spot measurements of proteins E plasmid transfected cells, **E)** two batch-to-batch measurements of proteins of control cells, **F)** two batch-to-batch measurements of proteins M plasmid transfected cells, **G)** two batch-to-batch measurements of proteins N plasmid transfected cells, **H)** two batch-to-batch measurements of proteins E plasmid transfected cells.

**Table S1:** Relative standard deviation (RSD) of spot-to-spot measurements for two prominent peaks (780, 1046  $\text{cm}^{-1}$ ) in control, proteins of M plasmid transfected cell, and proteins of N plasmid transfected cell and for two peaks (768, 1014  $\text{cm}^{-1}$ ) in proteins of E plasmid transfected cell.

<b>Spot-to-spot</b>	<b>Cell proteins</b>	<b>RSD (%) for 780 peak</b>	<b>RSD (%) for 1046 peak</b>
<b>Spot-to-spot</b>	<b>Control</b>	14	15
	<b>M</b>	19	16
	<b>N</b>	22	18
		<b>RSD (%) for 768 peak</b>	<b>RSD (%) for 1014 peak</b>
	<b>E</b>	18	16