Electronic Supplementary Information:

Microspectroscopic SERS Detection of Interleukin-6 with Rationally Designed Gold/Silver Nanoshells

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Fig. S1. Extinction spectra (A) of hydrophilically stabilized Au/Ag-NS before and after bioconjugation to the antibody, corresponding SERS spectra (B) recorded after each subsequent functionalization step.

Fig. S2. Scheme for the functionalized glass slides (from HD-TRIDIA™) used in this study.
**Fig. S3.** SEM images of Au/Ag-NS on glass slides coated with different antigen concentrations.

**Fig. S4.** SERS false-color images and corresponding average SERS spectra (from 400 points) for IL-6 detection at 1 ng/mL recorded at the same day.
**Fig. S5.** SERS false-color images and corresponding average SERS spectra (from 400 points) for IL-6 detection at 1 ng/mL recorded at different days.
**Fig. S6.** SERS false-color images recorded for IL-6 detection using hydrophilically stabilized Au-NPs at the same size (60 nm).

**Fig. S7.** Extinction spectra of 60 nm Au/Ag-NS and 60 nm Au-NPs.