

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: The animation illustrates the coordinated operation of the loading, gradient and pushing pumps together with the switching of the trapping and column-selection valves for analytical column 1.

File Name: Supplementary Movie 2

Description: The animation illustrates the coordinated operation of the loading, gradient and pushing pumps together with the switching of the trapping and column-selection valves for analytical column 2.

File Name: Supplementary Movie 3

Description: The animation illustrates the coordinated operation of the loading, gradient and pushing pumps together with the switching of the trapping and column-selection valves for both analytical columns.

File Name: Supplementary Data 1

Description: Search parameter of MS raw data for datasets used to compare with Figure 4 results.

File Name: Supplementary Data 2

Description: Category names used in Figure 7A for each biological process term identified in the LPS-1 vs PBS, LPS-2 vs PBS, and LPS-1 vs LPS-2 comparisons, with the corresponding protein lists and fold changes for each comparison.

File Name: Supplementary Data 3

Description: Box plot statistics, including mean, n, standard deviation, median, Q1, Q3, Tukey lower and upper bounds, and lower and upper whiskers, for protein identifications and CV% of protein intensity (before and after $1.5 \times \text{IQR}$ filtering) in Figures 3, 5, and 6; and protein identification retention rates after each data-filtering step.