

Supporting Information

SI Table 1. Comparison of in-solution digestion and Tube-Gel digestion of phagosome membrane extracts.^a

Digestion Condition	0.01 % SDS, dual enzymes ^b	0.2% SDS, trypsin alone	0.2% SDS, dual enzymes	Gel-assisted digestion
Trial 1	3	13	20	64
Trial 2	5	18	26	69
Trial 3	4	13	17	60

^a The number of protein IDs from each digestion product was used for assessment of digestion efficiency.

^b Dual enzyme treatment involved Lys-C digestion prior to tryptic digestion.

SI Table 2A. Proteins identified in the macrophage phagosomal membrane in this study

SI Table 2B. Quantitative ratios of phagosomal proteins found in two experiments using QSTAR Pulsar or Elite MS

SI Table 3. Overlapping and unique IDs from data sets generated by our new platform or the conventional method