

Supplementary Table 2A: Percentage of MS/MS identified

	1 µg HeLa eluting over 60 min	0.1 µg HeLa eluting over 60 min
Faster method (17,500 resolution, 30 ms injection time)	67%	34%
Fast method (17,500 resolution, 60 ms injection time)	70%	53%
Sensitive method (35,000 resolution, 120 ms injection time)	73%	73%

Every measurement performed in triplicate, average standard deviation < 2%

Supplementary Table 2B: Number of Peptide Spectrum Matches (PSM)

	1 µg HeLa eluting over 60 min	0.1 µg HeLa eluting over 60 min
Faster method (17,500 resolution, 30 ms injection time)	23728	11243
Fast method (17,500 resolution, 60 ms injection time)	22082	14931
Sensitive method (35,000 resolution, 120 ms injection time)	15721	14893

Every measurement performed in triplicate, average standard deviation < 800