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Supplementary Material

Comparison of Poly(Styrene-Divinylbenzene)-based Monolithic and Bead-based Methodologies Used in NANOFLOW LCMS for Proteomic Studies

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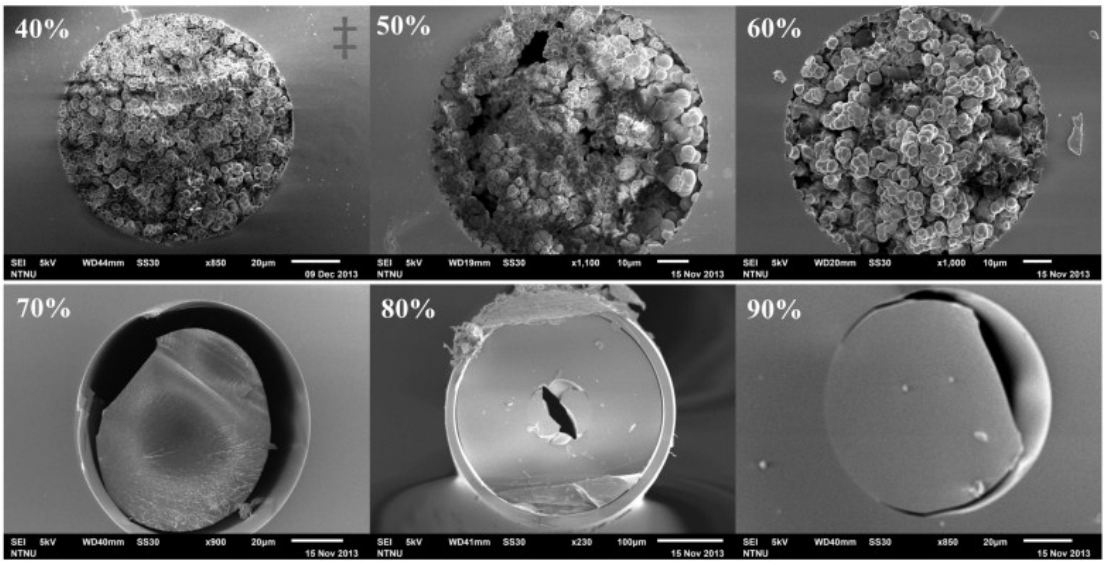

Fig. S1 Scanning electron microphotographs of different concentrations for SDVB monolithic capillary column

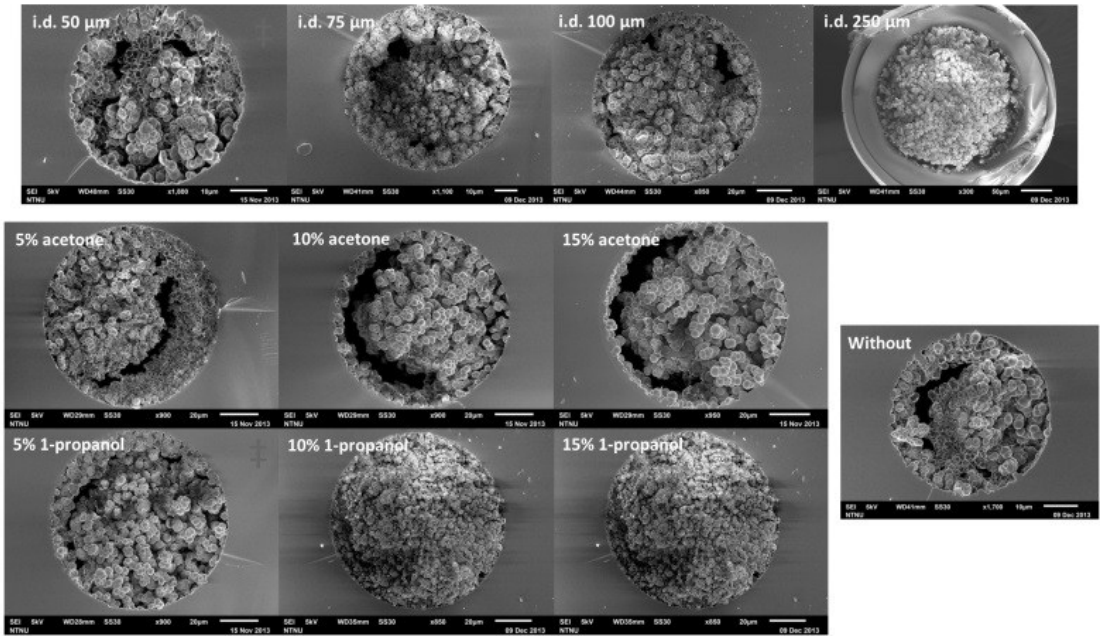

Fig. S2 Scanning electron microphotographs of varying inner diameter and percentage of porogenic reagents for SDVB monolithic capillary column

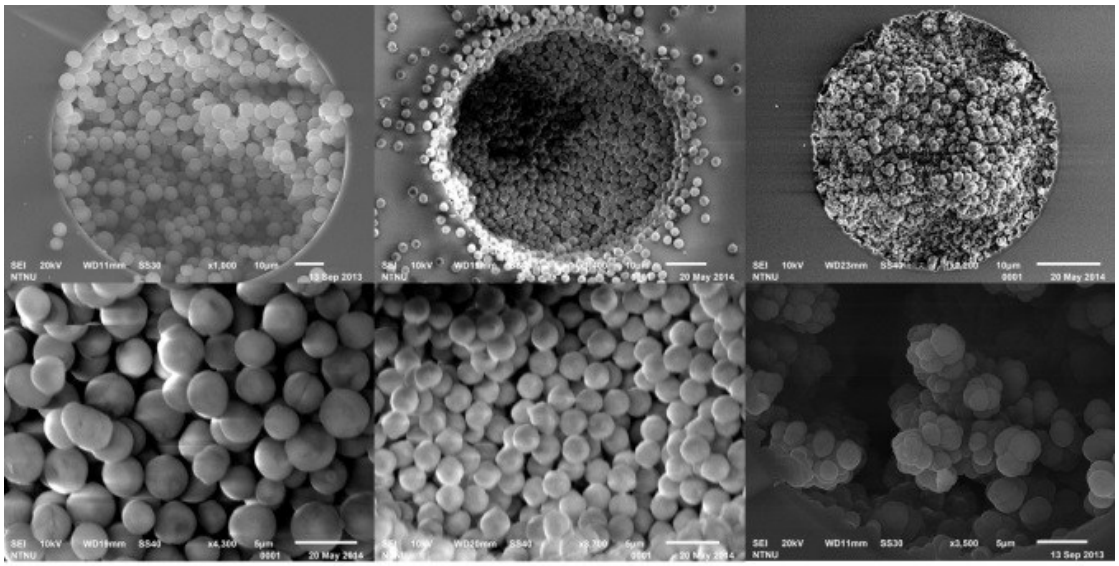

Fig. S3. Scanning electron microphotographs of totally porous silica C18, HALO fused-core C18, and SDVB monolithic capillary column, respectively

Tryptic BSA	**Amount**	**# of Queries**	**# of Matches**	**# of Sequence**	**Sequence coverage**	**Pressure @ 300 nL min^{-1}**	**column remark**
C18/C18	0.4 µg	861	83 (79)	38 (37)	62%	121.5 bar	(2/10 cm) (i.d. 100/75 µm)
C18/HALO	0.4 µg	408	57 (57)	24 (24)	40%	175.5 bar	
C18/4 m SDVB	0.4 µg	1173	91 (89)	30 (29)	51%	120.9 bar	(2 cm/ 4 m) (i.d. 100/50 µm)
Tryptic serum					**# of Protein**		
C18/C18	0.4 µg	1618	251 (186)	147 (121)	29	121.5 bar	(2/10 cm) (i.d. 100/75 µm)
C18/HALO	0.4 µg	1480	203 (155)	86 (75)	30	175.5 bar	
C18/4 m SDVB	0.4 µg	2276	155 (116)	62 (49)	13	120.9 bar	(2 cm/4 m) (i.d. 100/50 µm)
Tryptic fetuin							
C18/C18	0.4 µg	1566	415 (70)	85 (12)	85%	121.5 bar	(2/10 cm) (i.d. 100/75 µm)
C18/HALO	0.4 µg	696	255 (34)	56 (8)	59%	175.5 bar	
C18/4 m SDVB	0.4 µg	900	300 (52)	53 (9)	76%	120.9 bar	(2 cm/4 m) (i.d. 100/50 µm)

Table. S1 The total numbers of MS/MS spectra; MS/MS spectra that matched

peptides, unique peptides, sequence coverage, and column back pressure for different types of columns were evaluated by the separation of tryptic BSA, tryptic serum, and tryptic fetuin with the nanoLC ESI-MS system