

The EOF mobility vs pH graph (ESI,† Fig. S1) and the corresponding reproducibility data (ESI,† Table S1) of the DR/PVA coatings:

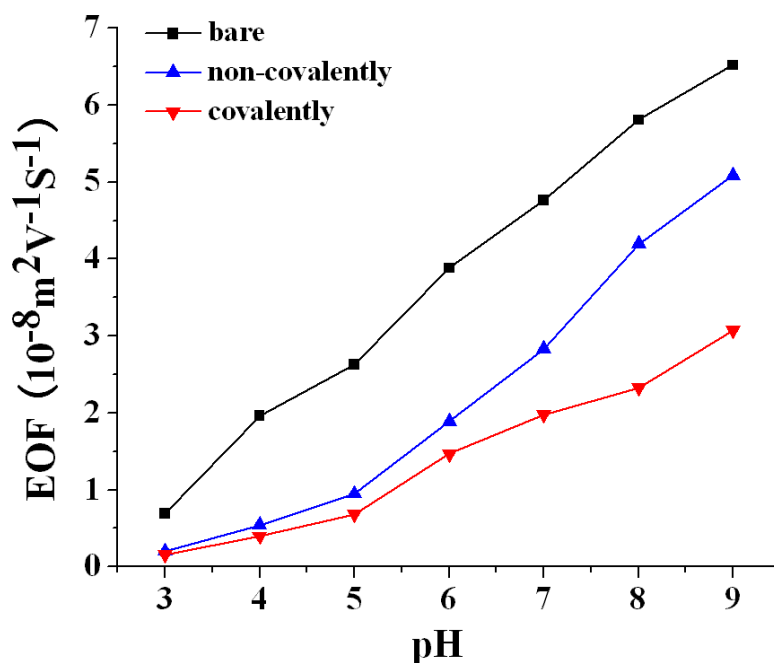


Fig. S1. Influence of pH on EOF of bare, DR/PVA non-covalently and covalently coated capillary columns. Test conditions: buffer, 40 mM phosphate; injection, 20 s with a height difference of 20 cm; applied voltage, +15 kV; UV detection, 214 nm; capillary, 75 μm ID \times 50 cm (41 cm effective); capillary temperature, 25 $^{\circ}\text{C}$.

Table S1. Separation performance of the DR/PVA covalent capillary coatings

protein	Migration time RSD (%)			
	run to run (n=5)	day to day (n=7)	capillary to capillary (n=5)	continuous 200 times running
Cyt-c	0.93	1.95	2.83	2.44
Lys	0.75	1.89	2.97	2.21
BSA	1.47	2.49	3.65	2.62
AMG	1.61	2.72	3.87	2.89
Mb	1.53	2.55	3.75	2.80

Separation conditions: the same as Fig. 8.