

**Electronic Supporting Information:**

**Monolith and coating enzymatic microreactors of  
L-Asparaginase: kinetics study by MCE-LIF for  
potential application in ALL treatment**

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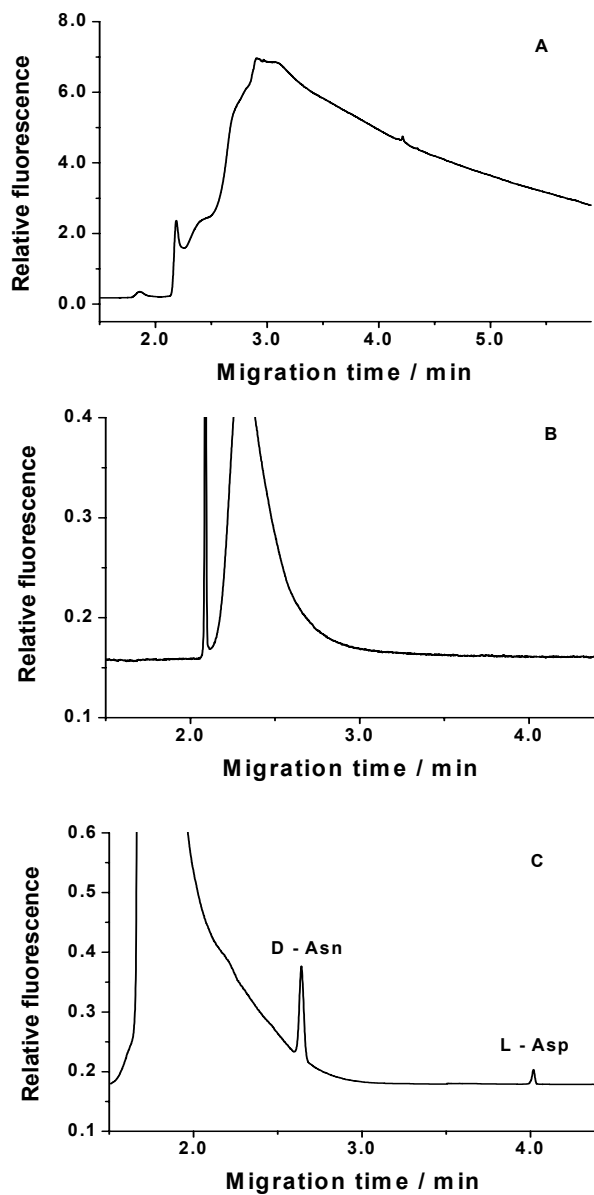
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**Experiment:**

The whole blood samples added with D,L-Asn was used to evaluate the performance of the enzyme reactors. Whole blood samples without treatment were obtained from Medical Experiment and Analysis Center, PLA General Hospital (Beijing, China). The whole blood samples 200  $\mu$ L, added with 200  $\mu$ L D,L-Asn (430  $\mu$ M), was filtered through a membrane filter with 0.45 mm pores to avoid the mixture choking the capillary enzymatic reactors. And then the mixture pumped through the capillary enzymatic reactor at a flow rate of 100  $\mu$ L/h. The flowing out solution was put into boiling water for 15 min and was centrifuged for 10 min (10, 000 rpm) to eliminate the proteins. Then the supernatant solution was derivatized with FITC and diluted for future analysis. The blank whole blood sample was treated as the same procedure except adding with 200  $\mu$ L water instead of 200  $\mu$ L D,L-Asn. The results were shown in **Fig. S1**.



**Fig. S1.** Electropherograms of hydrolyzation of whole blood samples with D,L-Asn and blank whole blood sample using coating enzymatic reactor.  
(A) whole blood sample added with D,L-Asn;  
(B) 20 fold diluted of blank whole blood sample;  
(C) 20 fold diluted of (A).