

1 **Supplementary Information**

2 Post-screening characterization of an acidic polysaccharide from  
3 *Echinacea purpurea* with potent anti-inflammatory properties *in vivo*

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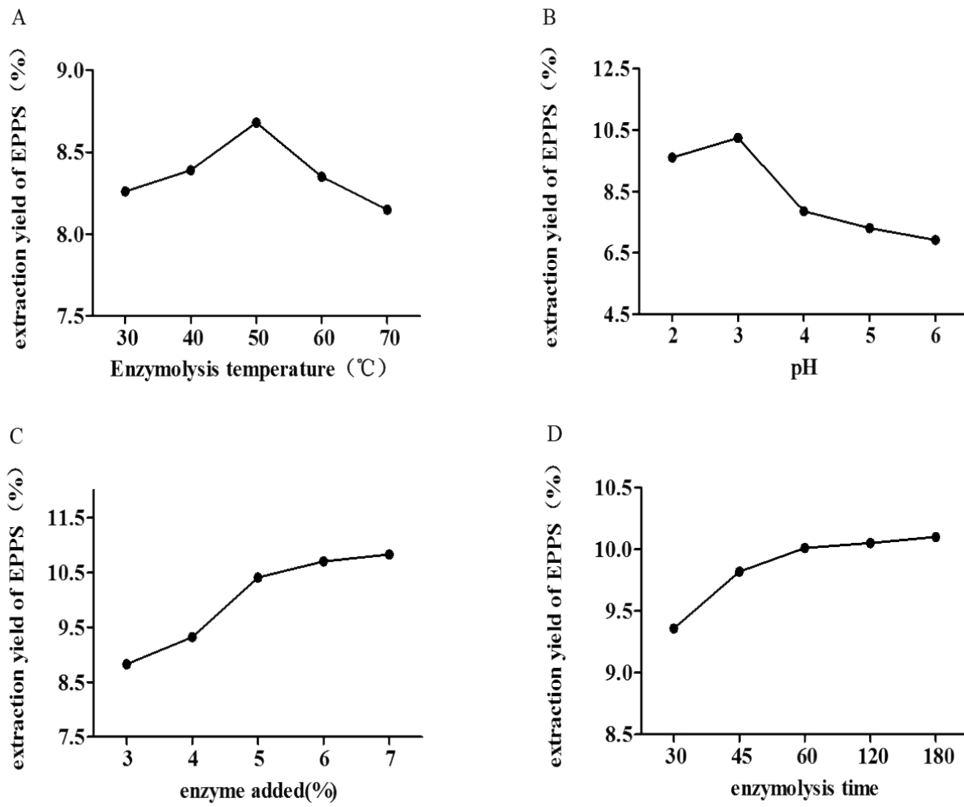
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11 **Table S1.** Orthogonal experiment for EPPS extraction by pectinase

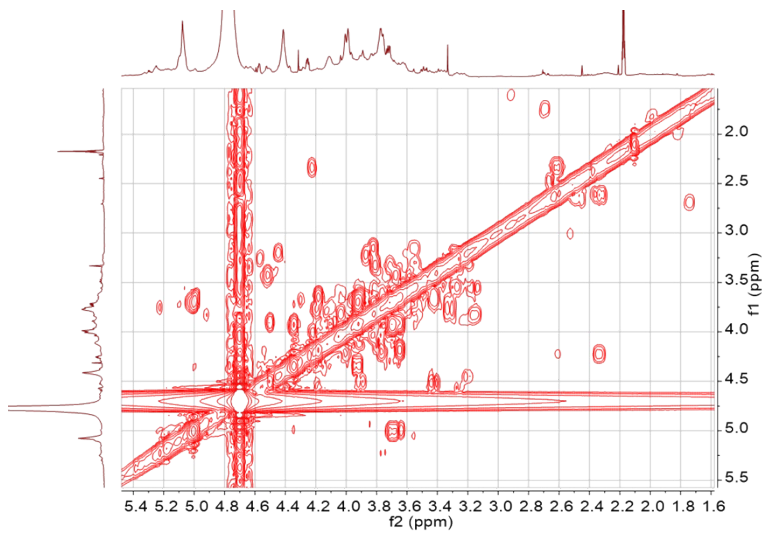
Number	Enzymolysis temperature (°C)	pH	Amount of Enzyme (%)	Enzymolysis time (min)	Extraction yield (%)
1	1	1	1	1	8.8
2	1	2	2	2	9.19
3	1	3	3	3	9.81
4	2	1	2	3	10.42
5	2	2	3	1	10.38
6	2	3	1	2	9.36
7	3	1	3	2	9.3
8	3	2	1	3	9.81
9	3	3	2	1	9.98
k <sub>1</sub>	9.267	9.507	9.323	9.720	
k <sub>2</sub>	10.053	9.793	9.863	9.283	
k <sub>3</sub>	9.697	9.717	9.830	10.013	
R	0.786	0.286	0.540	0.730	



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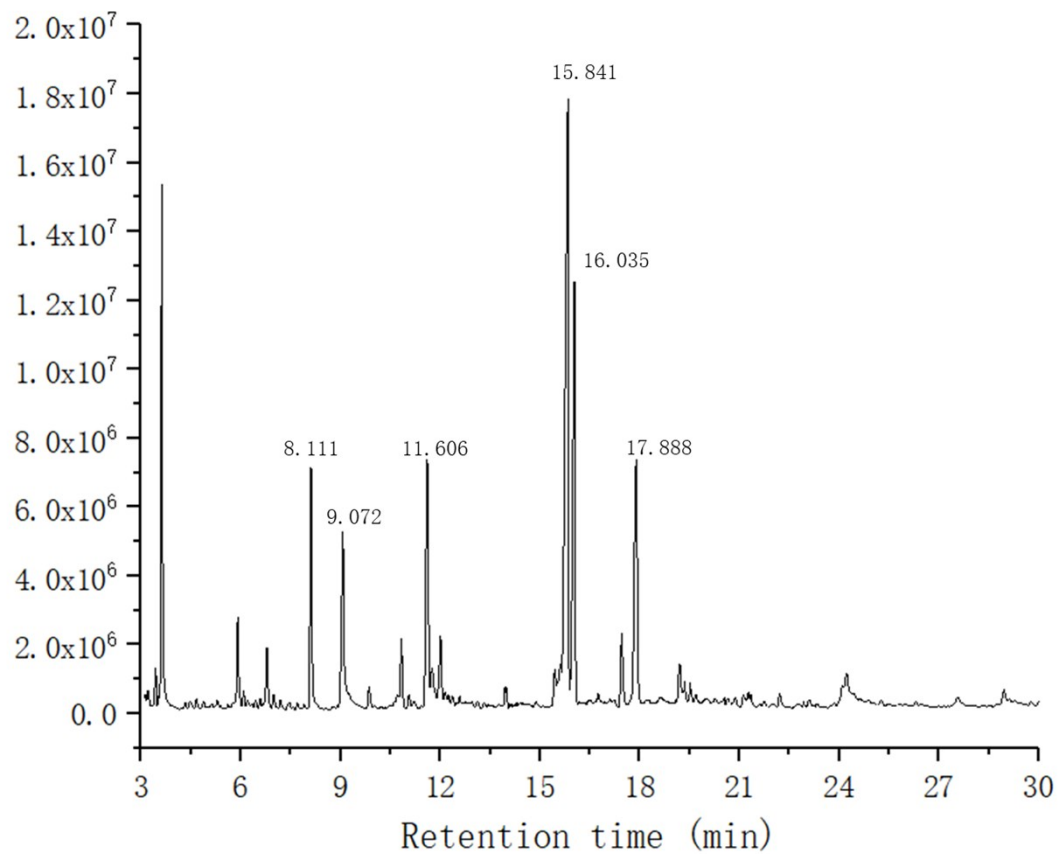
13 **Fig. S1.** the effects on extraction yield of EPPS by pectinase. (A) Temperature (B) pH value

14 (C) amount of enzyme (D) enzymolysis time

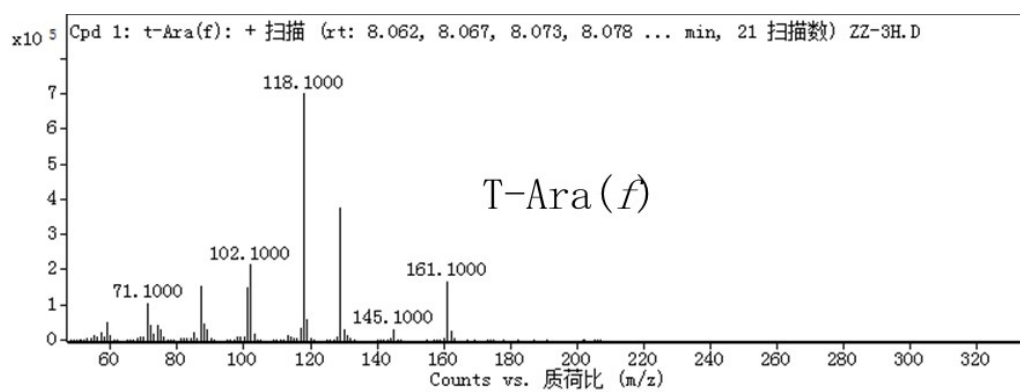


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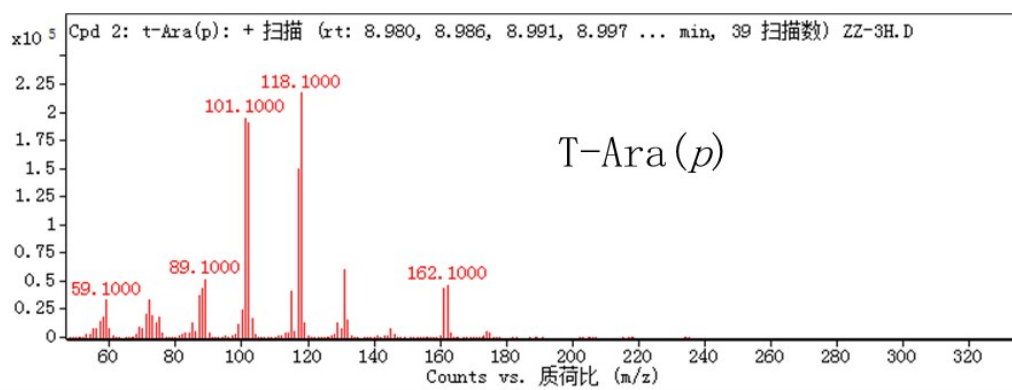
16 **Fig. S2.** H-H-COSY spectra of EPPS-3



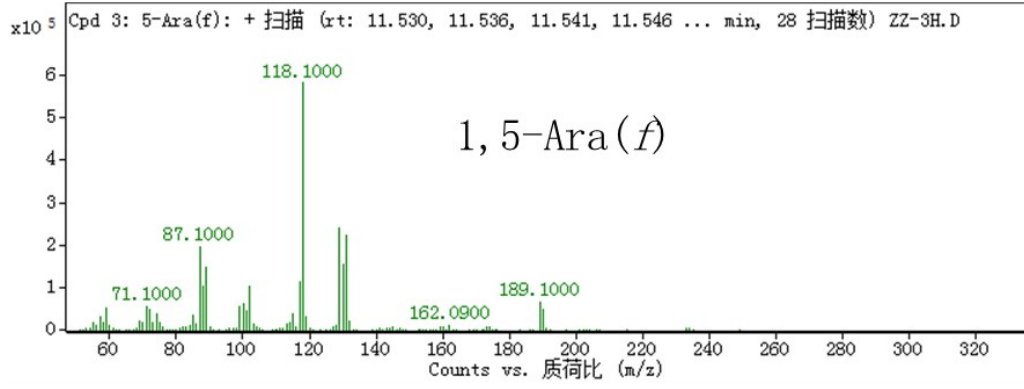
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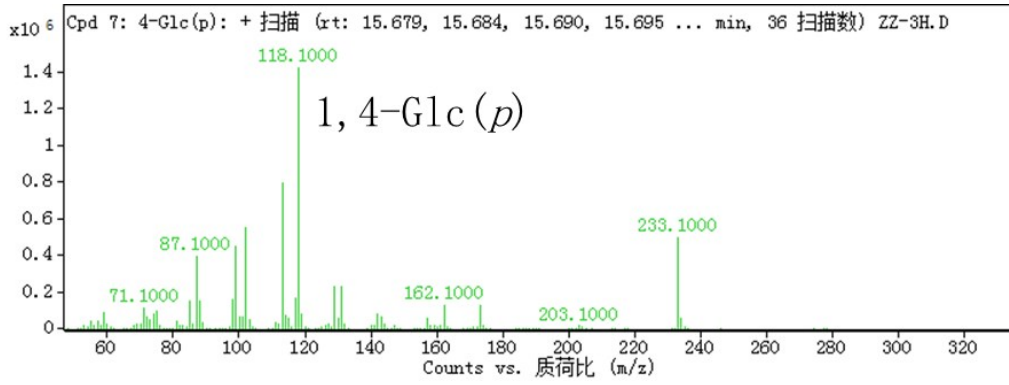
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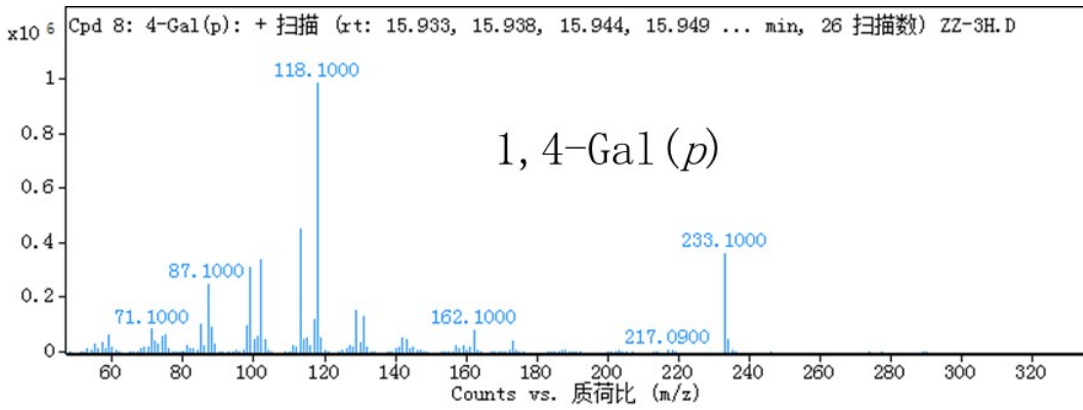
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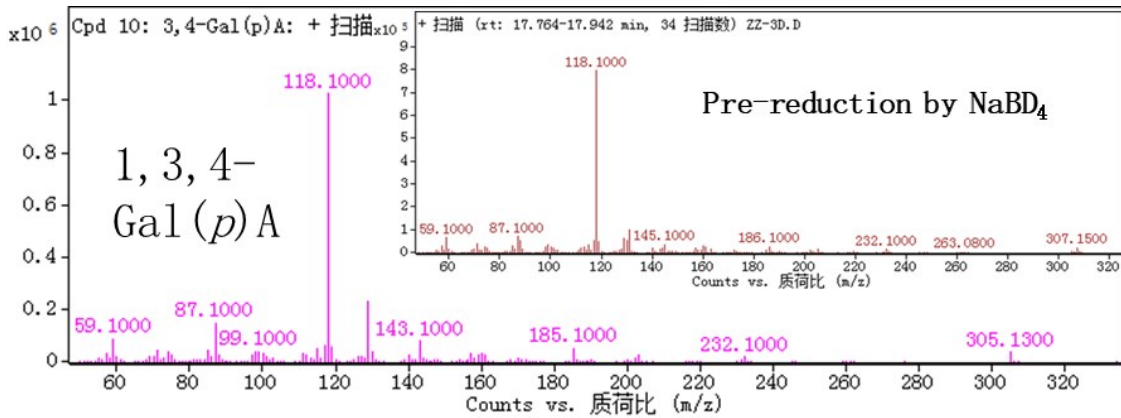
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25 **Fig. S3.** Total ion chromatogram of the derivatives and the mass spectrum of fragments (ZZ-3,  
26 abbreviation in Chinese letter, stands for EPPS-3)