

SUPPLEMENTARY MATERIAL

Characterization of active compounds from *Gracilaria lemaneiformis* inhibiting protein tyrosine phosphatase 1B activity

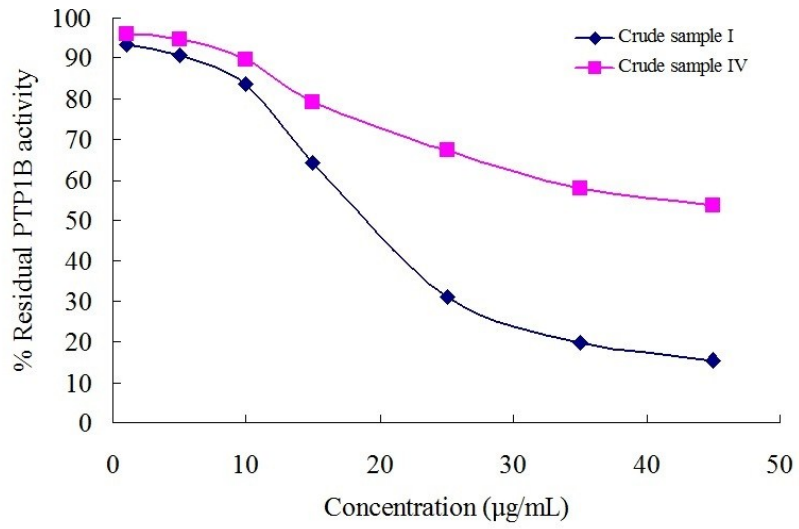
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and Yi Yang ^{c,*}

Supplementary information

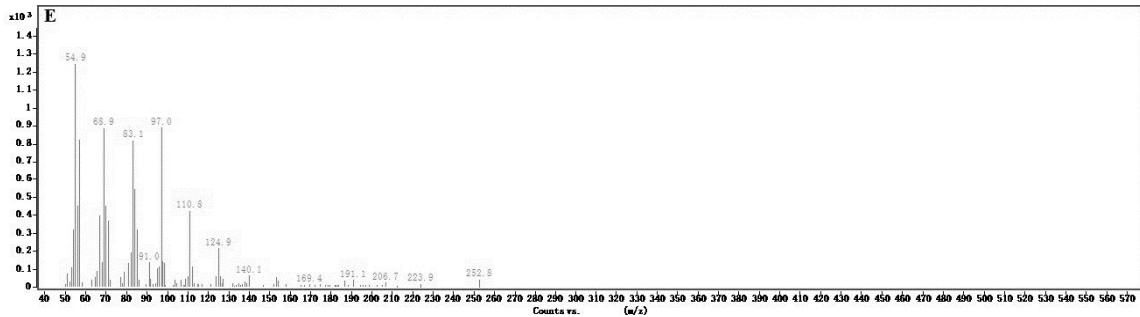
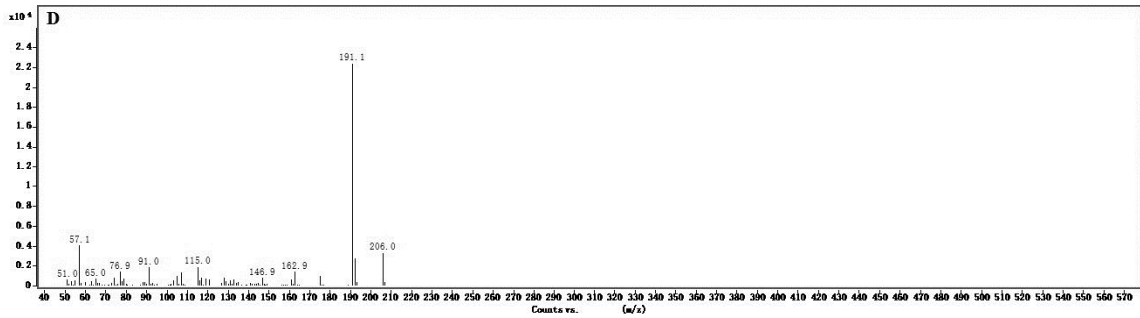
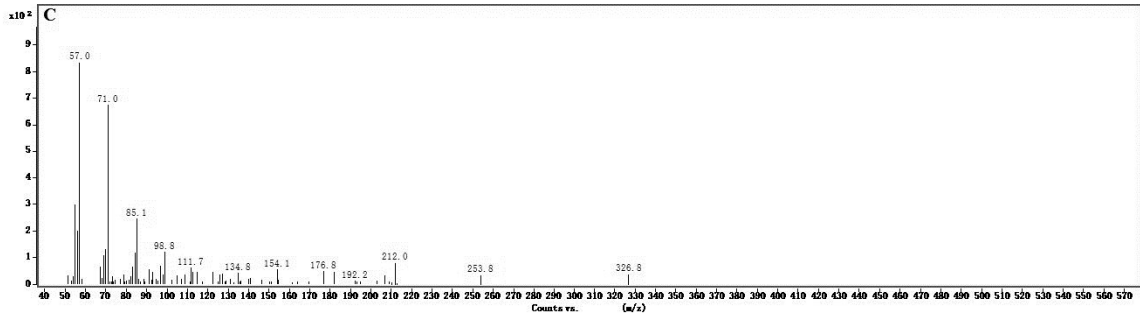
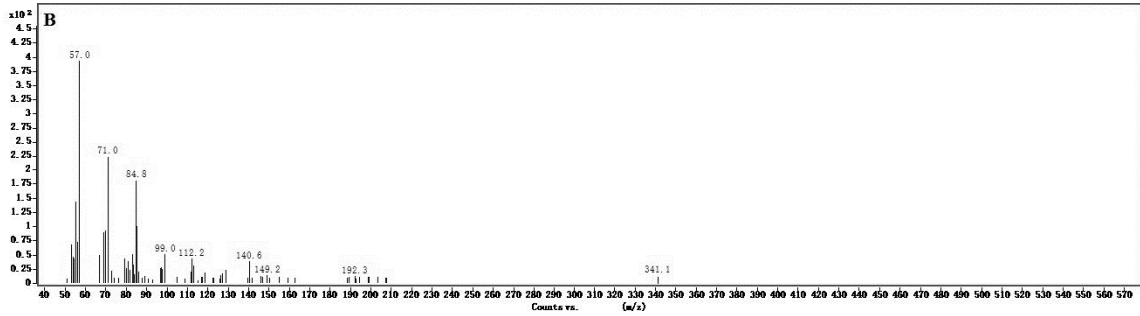
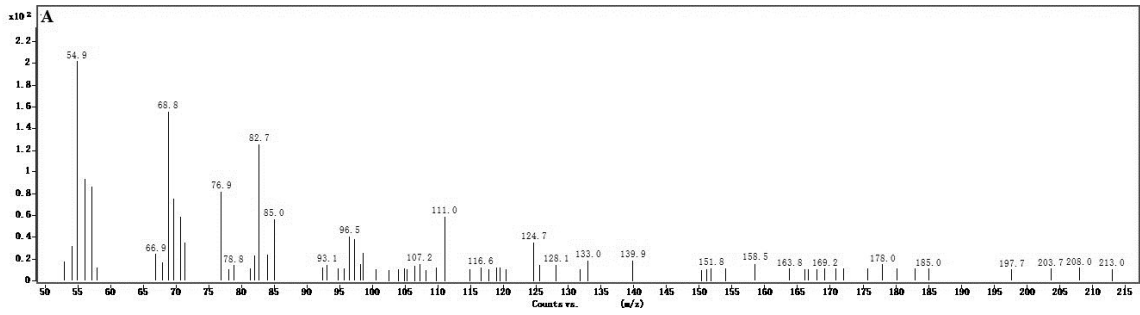
Supplementary Figure S1

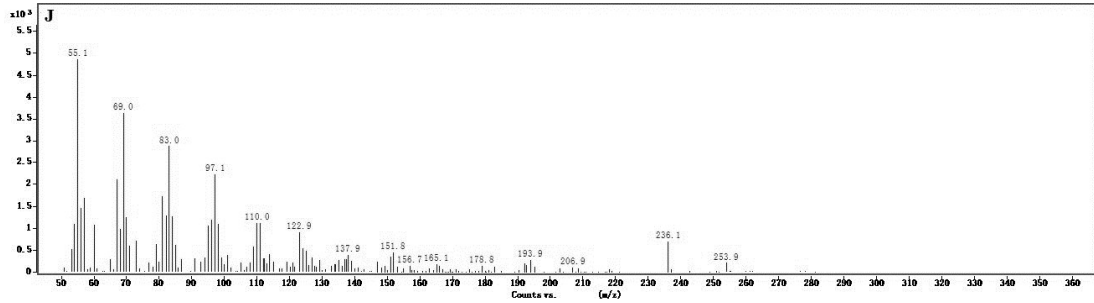
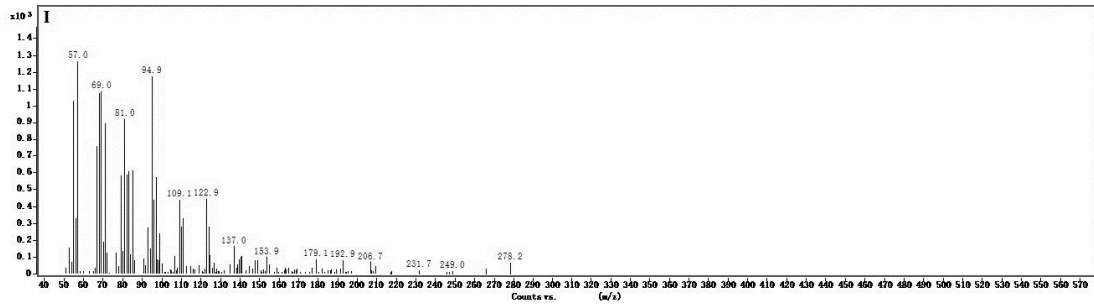
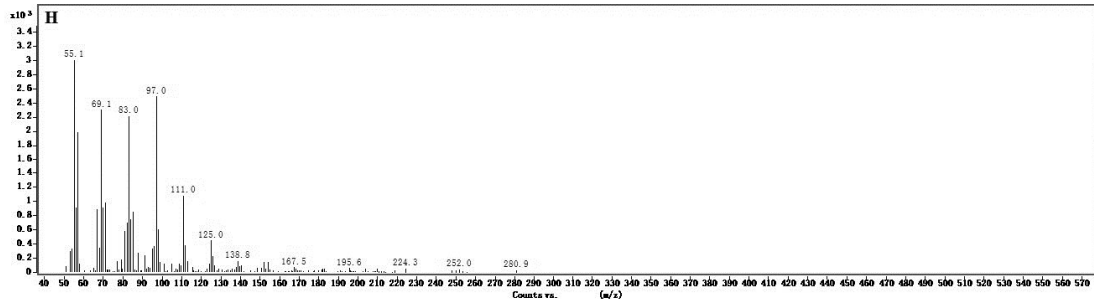
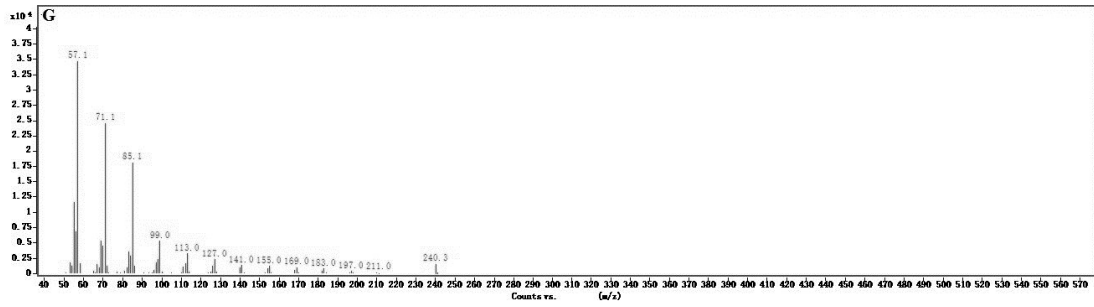
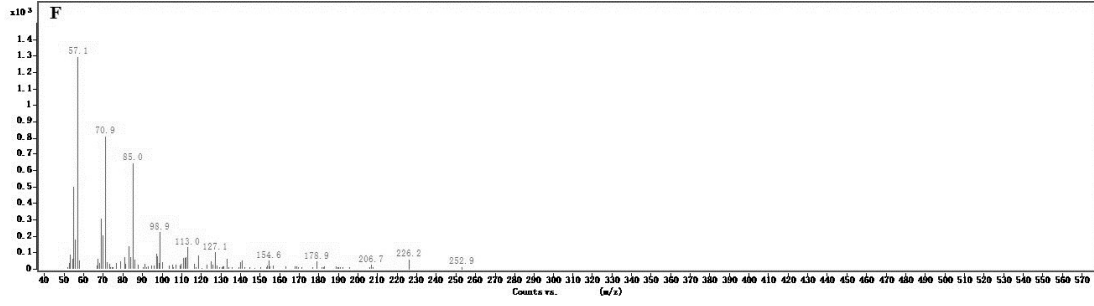
Supplementary Figure S2

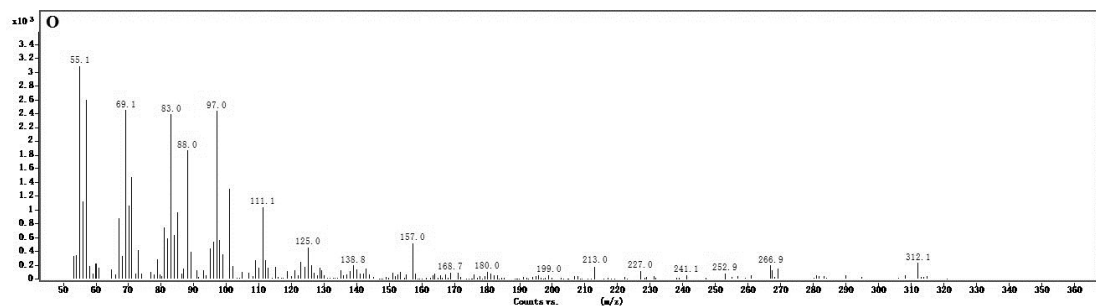
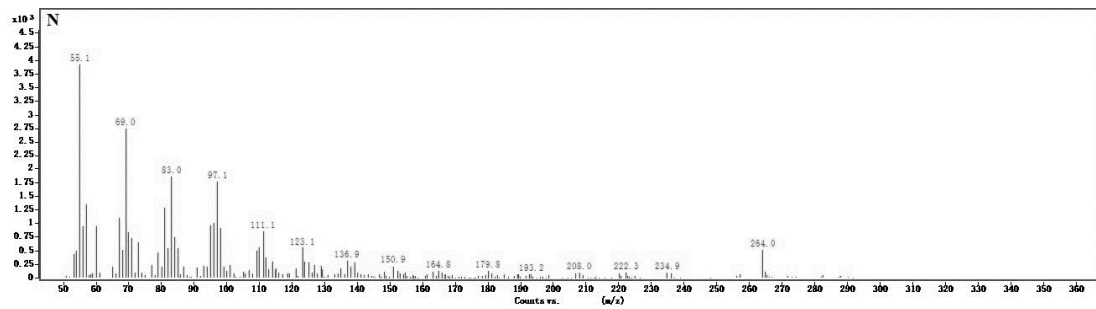
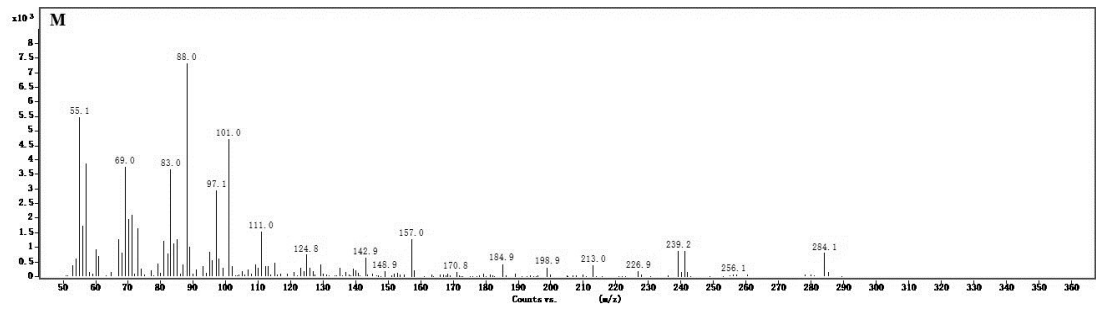
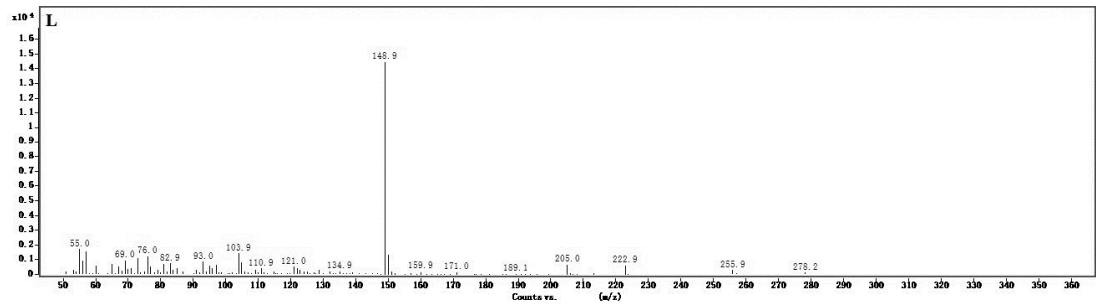
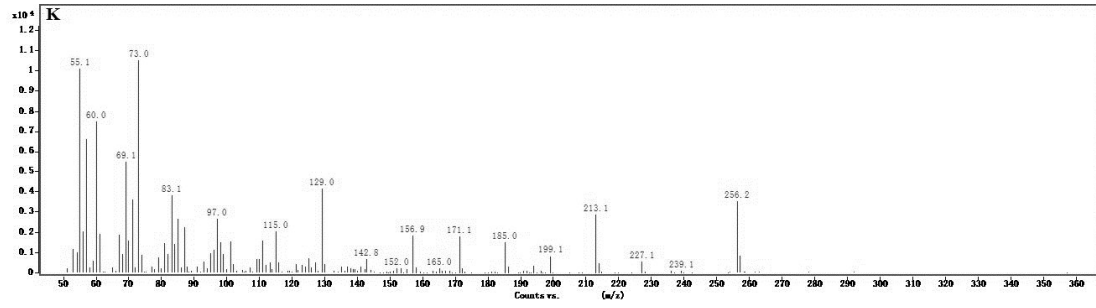
Supplementary Table S1

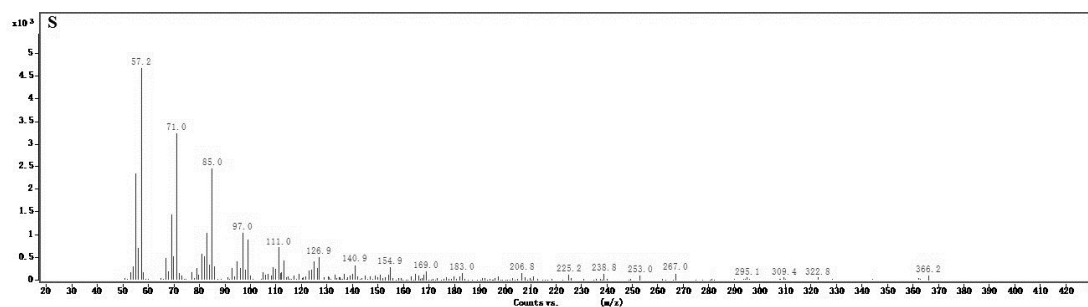
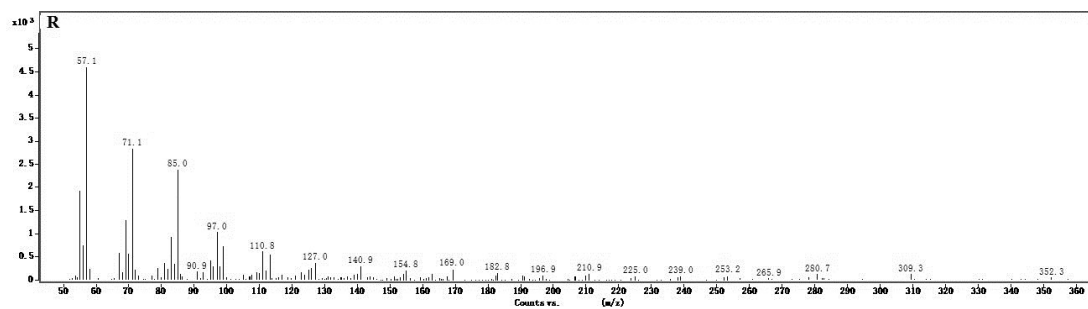
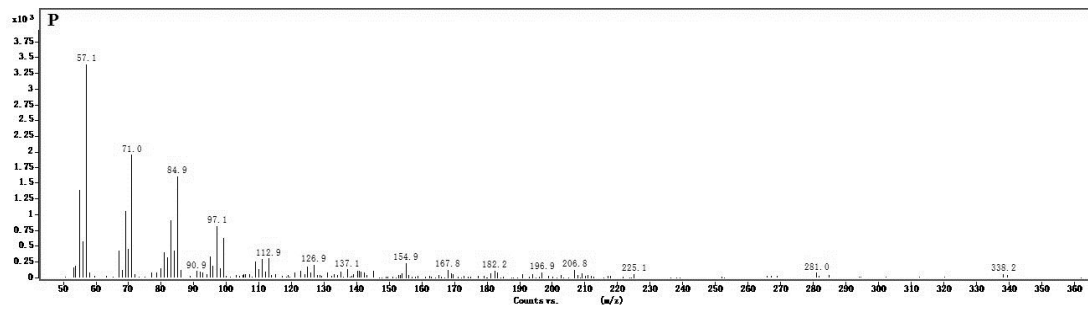


Supplementary Figure S1. The Crude sample I and IV inhibit PTP1B in a dose-dependent manner. Different concentrations were evaluated in vitro to establish a sigmoidal dose-response curve by non-linear regression ($n = 3$).









Supplementary Figure S2. Original MS spectra of identified compounds. A) compound 1; B) compound 2; C) compound 3; D) compound 4; E) compound 5; F) compound 6; G) compound 7; H) compound 8; I) compound 9; J) compound 10; K) compound 11; L) compound 12; M) compound 13; N) compound 14; O) compound 15; P) compound 16; R) compound 18; S) compound 19.

Supplementary table S1. Inhibitory rates of positive control.

Concentration (μM)	5	4	3	2	1	0.5	IC ₅₀	SD
	78.06	74.12	67.07	57.47	45.01	28.33	1.3349	
Inhibition (%)	78.88	73.82	66.41	57.53	44.88	28.52	1.3344	
	78.65	73.64	66.95	56.87	45.26	28.30	1.3387	
	Average						1.3360	0.0024