

**Evaluation of the Biological Activity of Glucosinolates and Their
Enzymolysis Products Obtained from *Lepidium meyenii* Walp.
(Maca)**

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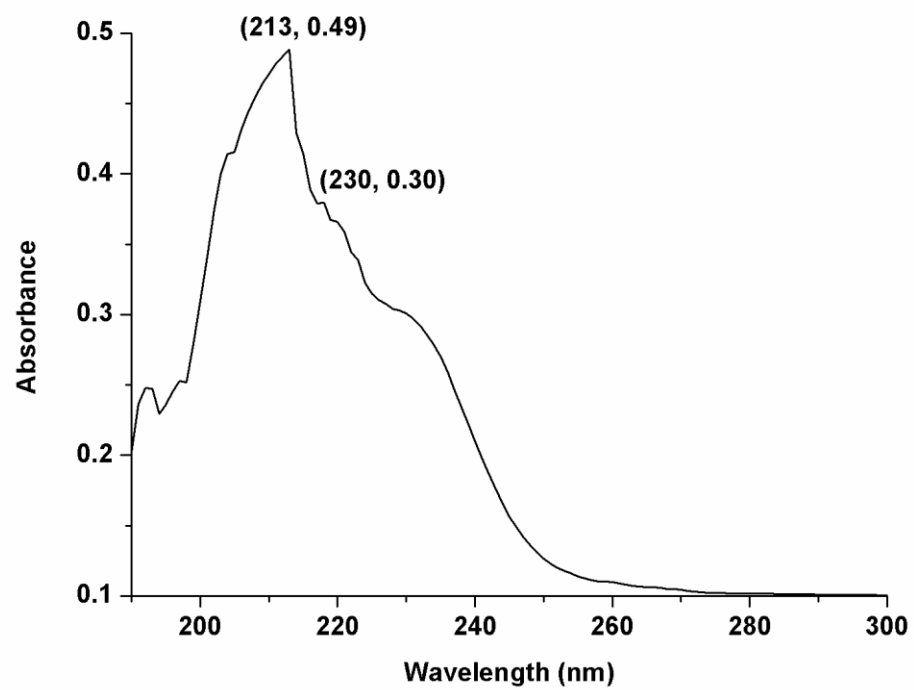


Figure S1 Ultraviolet absorption spectroscopy of glucosinolates.

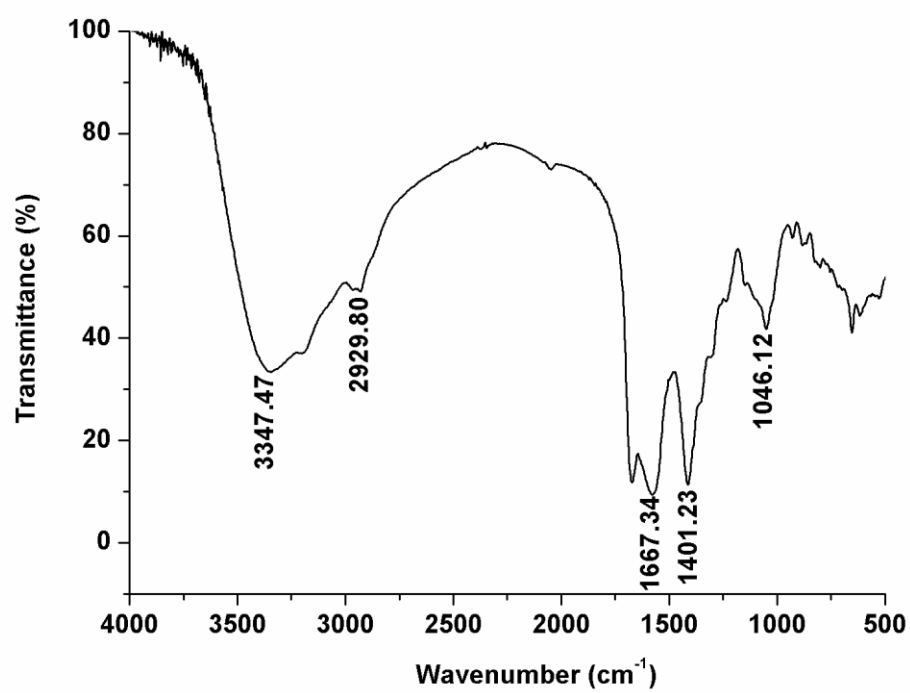


Figure S2 Fourier-transform infrared absorption spectroscopy of glucosinolates.

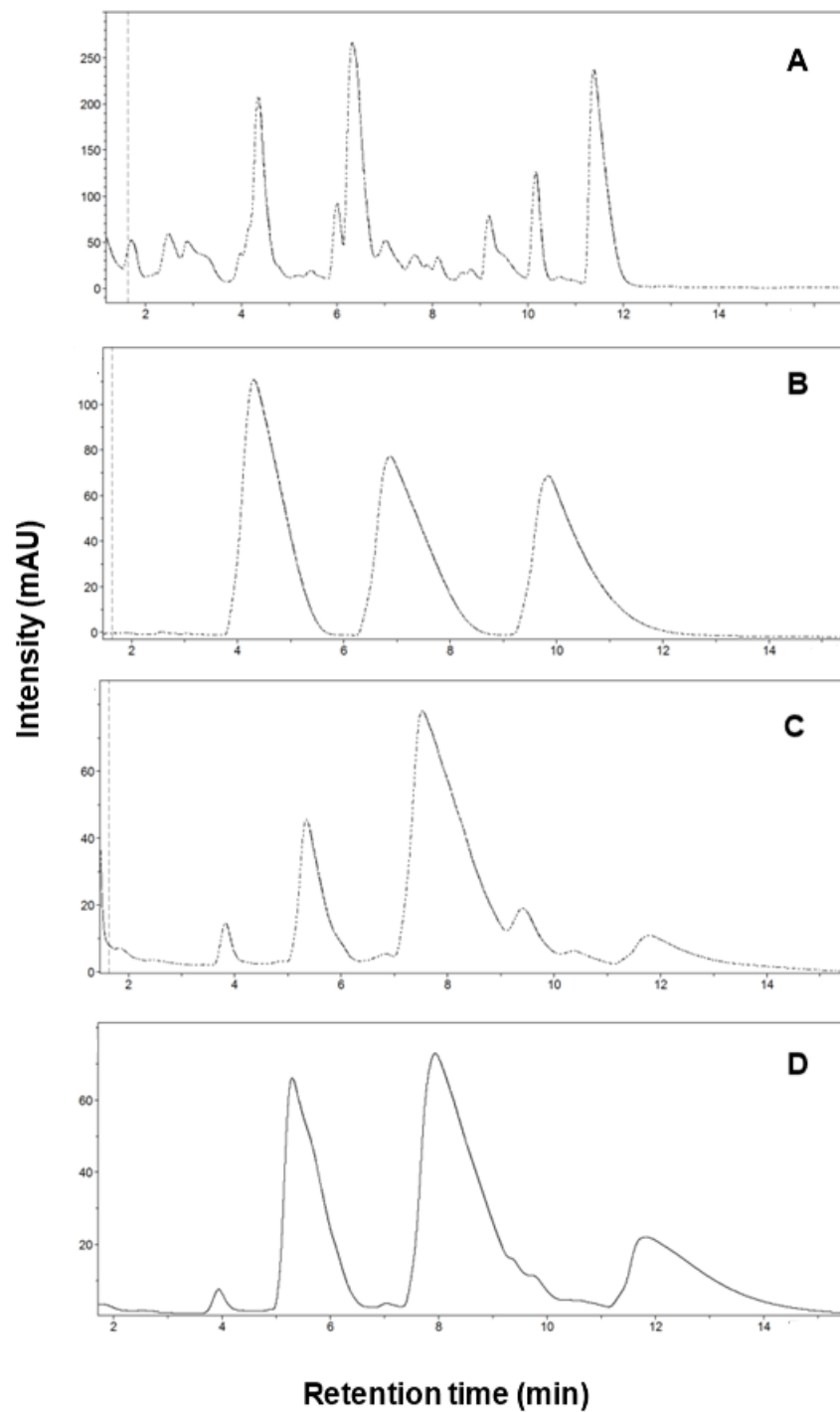


Figure S3 Ultra-high performance liquid chromatograms of Maca crude extract (A), standards (B), purified sample (C) and spiked sample (D), respectively.

Table S1 Characterization of *p*-hydroxybenzyl glucosinolate (GSB), benzyl glucosinolate (GTL) and *m*-methoxybenzyl glucosinolate (GLH) by ultra-high performance liquid chromatography-electrospray ionization-mass spectrometry

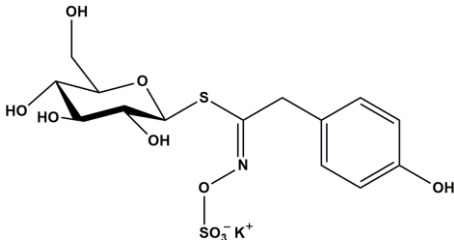
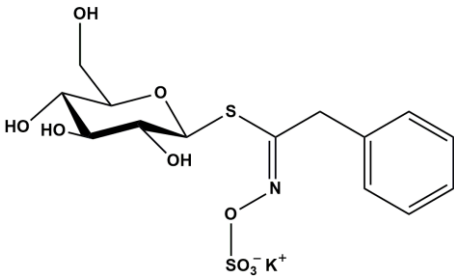
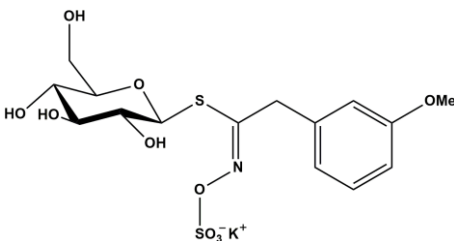
Sample	Chemical formula	Chemical structure	Ion type detected by MS	Measured m/z of ion	Theoretical m/z of ion	Relative error (ppm)
GSB	C ₁₄ H ₁₈ KNO ₁₀ S ₂		[M-K] ⁻	424.0389	424.0372	4.01
GTL	C ₁₄ H ₁₈ KNO ₉ S ₂		[M-K] ⁻	408.0443	408.0423	4.90
GLH	C ₁₅ H ₂₀ KNO ₁₀ S ₂		[M-K] ⁻	438.0548	438.0529	4.34

Table S2 The effects of glucosinolates extracted from dried Maca (D-GLS) and fresh Maca (F-GLS), benzyl glucosinolate (GTL), and benzyl isothiocyanate (BITC) at 100 µg/mL on growth inhibition of different tumor cell lines

Sample	Cell inhibition rate (%)				
	HL-60	A549	SMMC-7721	MCF-7	SW480
D-GLS	19.01±0.32	2.88±2.36	2.35±2.38	17.06±2.91	29.14±2.57
F-GLS	27.58±1.14	4.08±0.76	7.09±1.39	11.73±1.58	13.83±3.10
GTL	2.60±2.15	10.42±0.12	6.36±0.60	18.25±1.66	16.64±1.86
BITC	99.32±0.19	99.67±0.07	99.85±0.09	97.98±0.64	98.01±0.11