

SUPPLEMENTARY INFORMATION

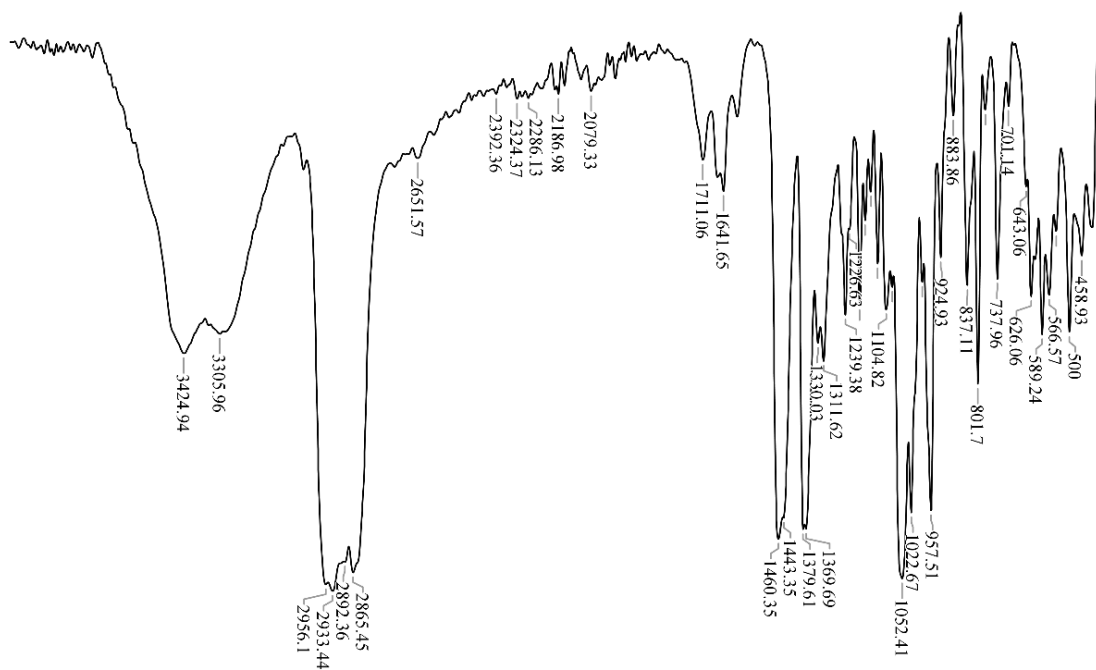
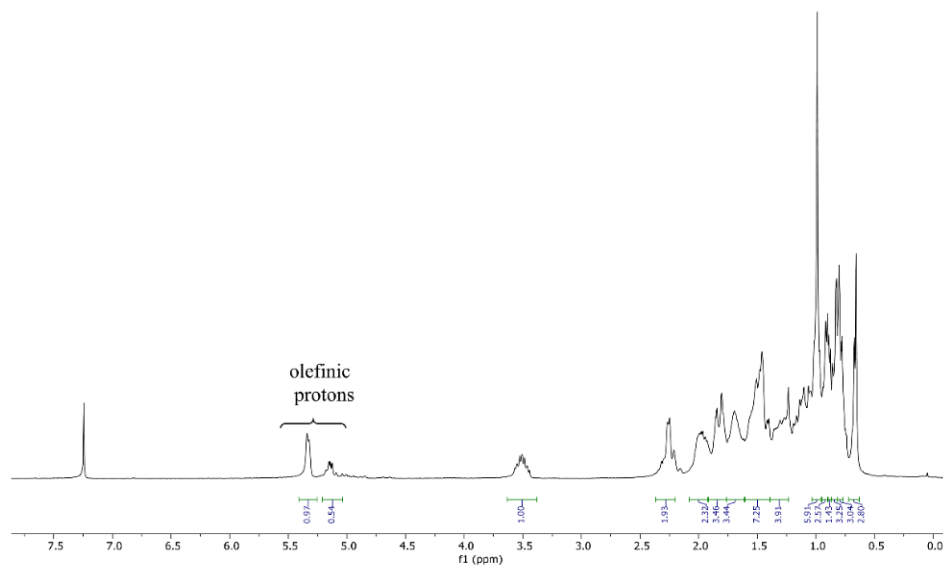


Fig. 1S. FT-IR spectrum of JC-2

A



B

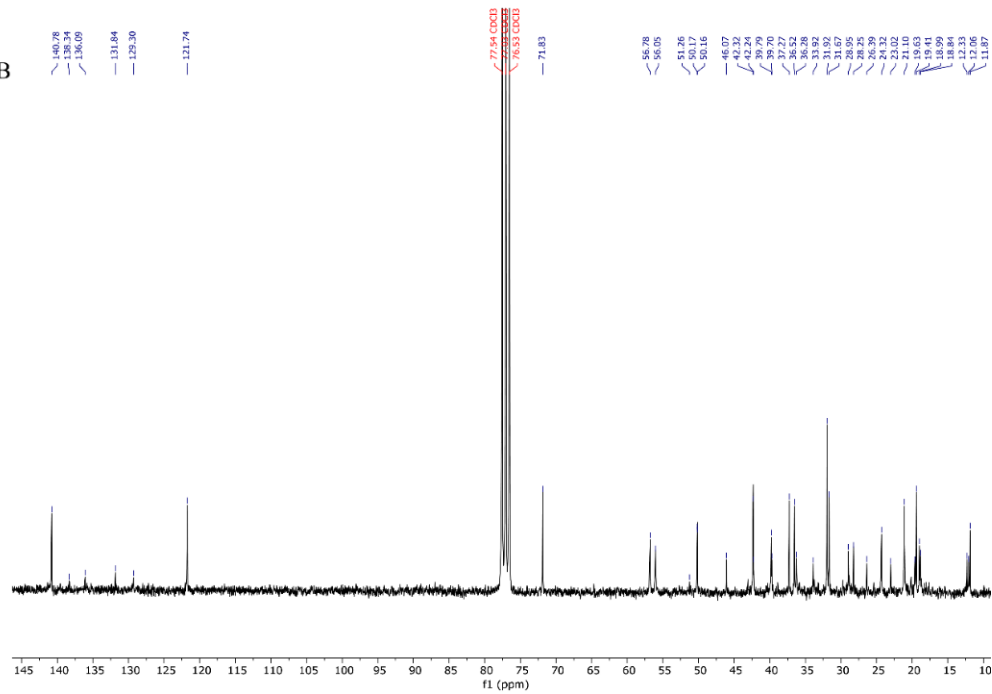


Fig. 2S. (A) ^1H - and (B) ^{13}C - NMR spectra of JC-2

Table 1S. ^{13}C -NMR data of JC-2 in comparison with β -sitosterol and Stigmasterol

Carbon number	Type of carbon atom	^{13}C (δ , ppm) of JC-2	^{13}C (δ , ppm) [1])	
			β -sitosterol	Stigmasterol
1	CH ₂	37.27	37.2	37.2
2	CH ₂	31.67	31.6	31.6
3	CH	71.83	71.8	71.8
4	CH ₂	42.32	42.27	42.27
5	C	140.78	140.7	140.7
6	CH	121.74	121.7	121.7
7	CH ₂	31.9	31.9	31.9
8	CH	31.9	31.9	31.9
9	CH	50.16	50.1	50.1
10	C	36.52	36.5	36.5
11	CH ₂	21.10	21.06	21.06
12	CH ₂	39.79	39.8	39.7
13	C	42.32	42.19	42.19
14	CH	56.78	56.7	56.8
15	CH ₂	24.32	24.3	24.4
16	CH ₂	28.25	28.2	28.9
17	CH	56.05	56.0	55.9
18	CH ₃	11.87	11.97	12.04
19	CH ₃	19.63	19.4	19.4
20	CH	36.28	36.1*	40.5*
21	CH ₃	19.41	18.8	21.09
22	CH ₂	33.92/138.34	33.9*	138.3*
23	CH ₂	26.39/129.3	26.0*	129.2*
24	CH	46.07/51.26	45.8*	51.2*
25	CH	28.95	29.1	31.9
26	CH ₃	18.99	19.02	21.2
27	CH ₃	18.84	19.8	18.97
28	CH ₂	23.02	23.0	25.4
29	CH ₃	12.06	11.8	12.3

* Main differences between the two compounds¹

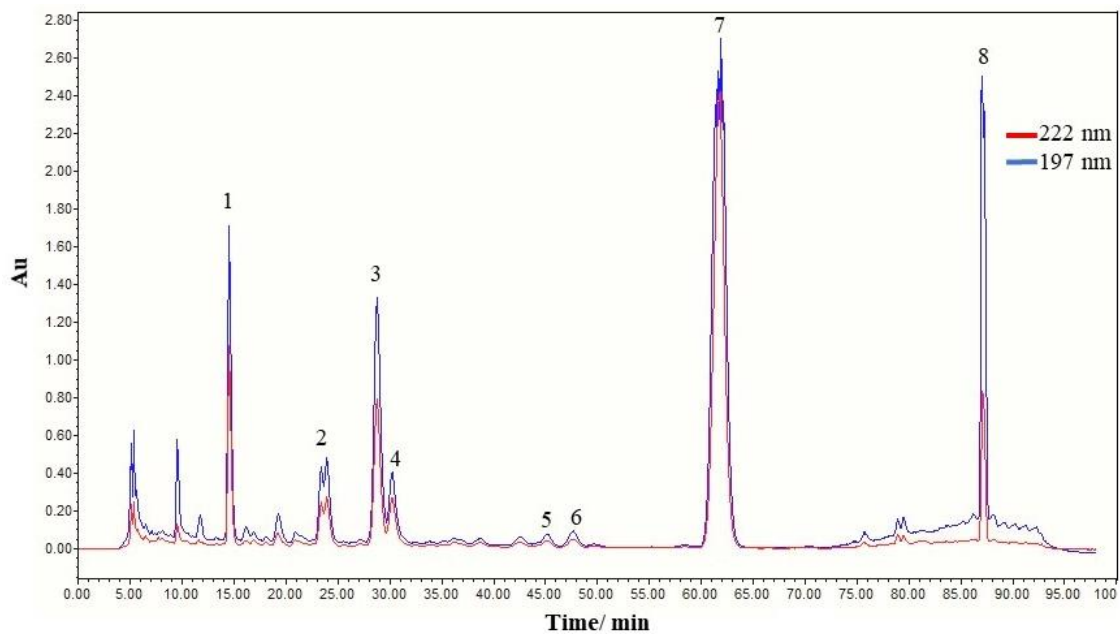


Fig. 3S. HPLC chromatogram of fraction JDH (15-21) showing peaks 1-8.

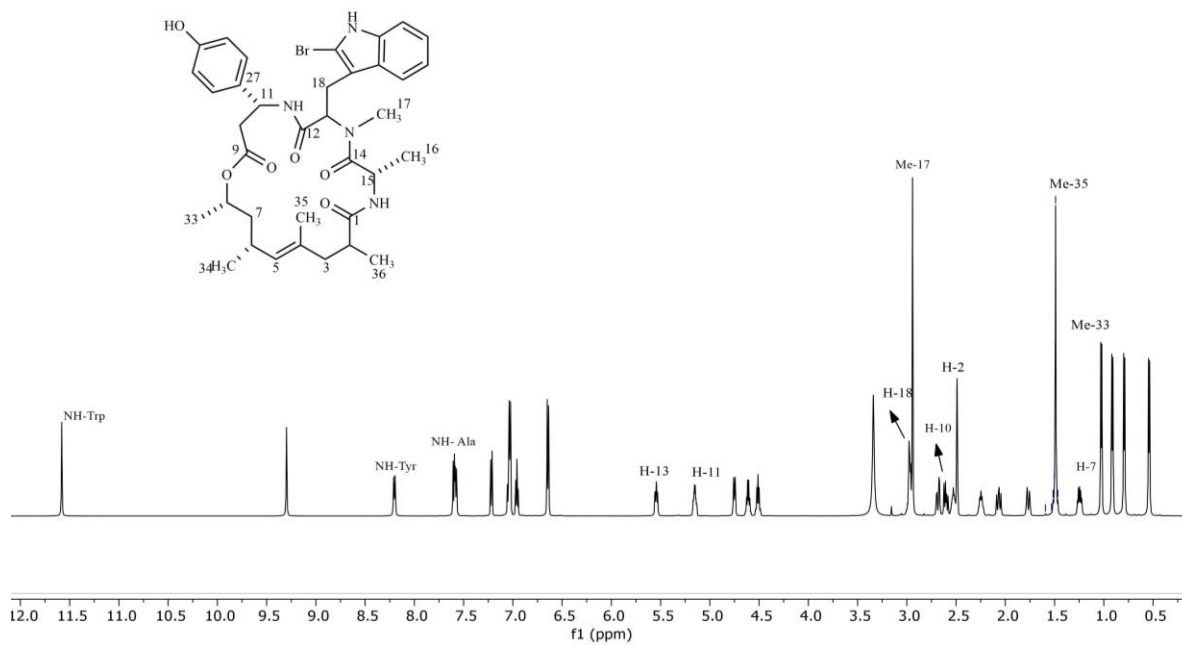


Fig. 4S. $^1\text{H-NMR}$ spectrum of isolate 7 (peak 7) in $\text{DMSO-}d_6$ (600 MHz) showing main signals for jaspamide.

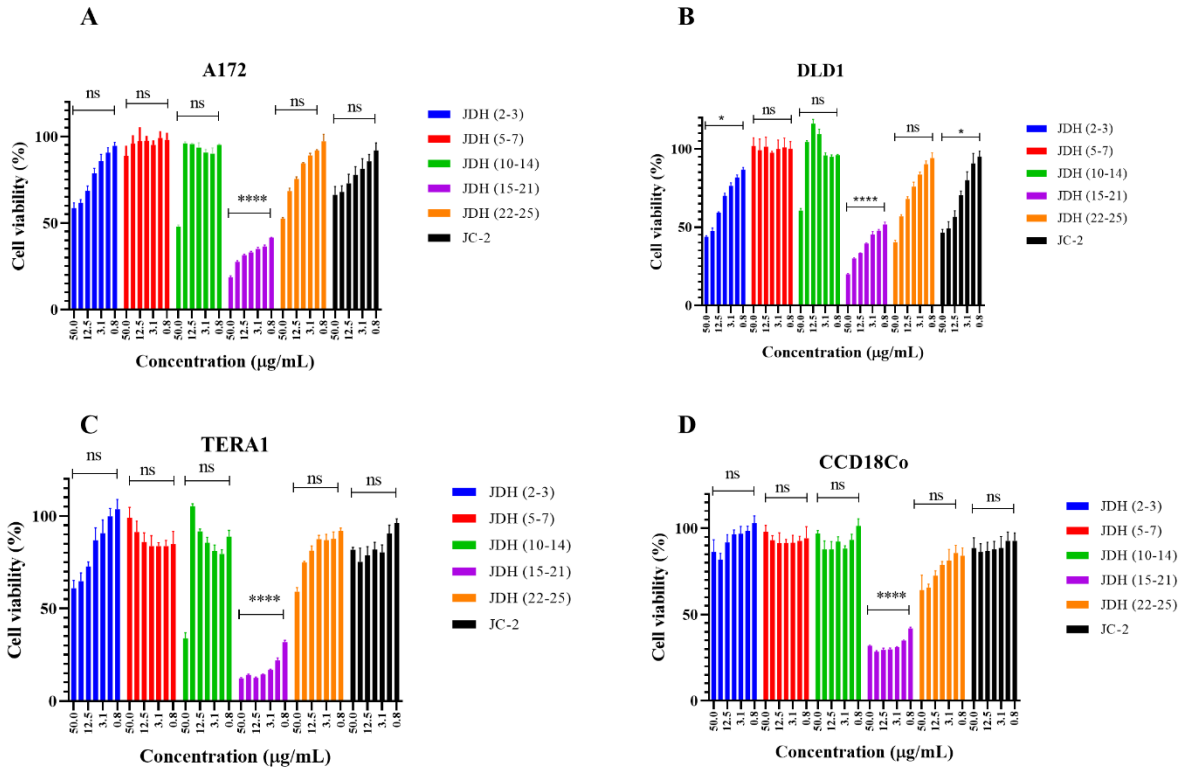


Fig. 5S Cell viability (%) of hexane fractions and JC-2 on A172 (A) DLD1 (B) TERA1 (C) and CCD18Co (D) cell lines. Results are presented as mean values \pm standard deviations ($n = 3$). Asterisks represent significant differences between the fractions and control (DMSO 0.7%); * $p < 0.05$ and **** $p < 0.001$ were considered statistically significant, ns – non significant.

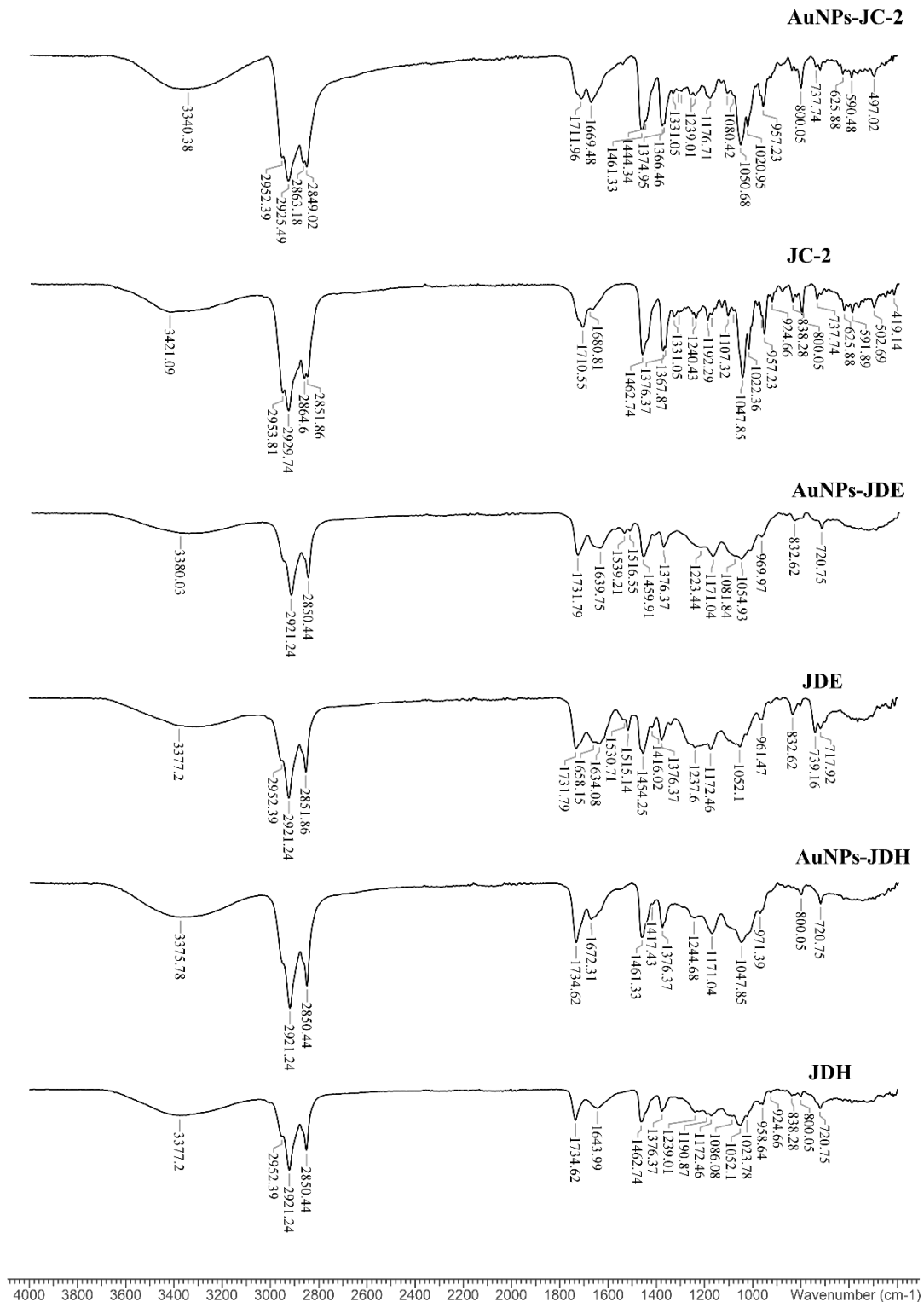


Fig. 6S FTIR spectra of native JDH, JDE and JC-2 and synthesized gold nanoparticles (AuNPs-JDH, AuNPs-JDE and AuNPs-JC-2).

REFERENCE

[1] J.-M.C. Cayme, C.Y. Ragasa, Structure elucidation of β -stigmasterol and β -sitosterol from *Sesbania grandiflora* [Linn.] Pers. and β -carotene from *Heliotropium indicum* Linn. by NMR spectroscopy, *Kimika*, 20 (2004) 5-12.