

Supporting Information for

Withaferin A, a Cytotoxic Steroid from *Vassobia breviflora*, Induces Apoptosis in Human Head and Neck Squamous Cell Carcinoma

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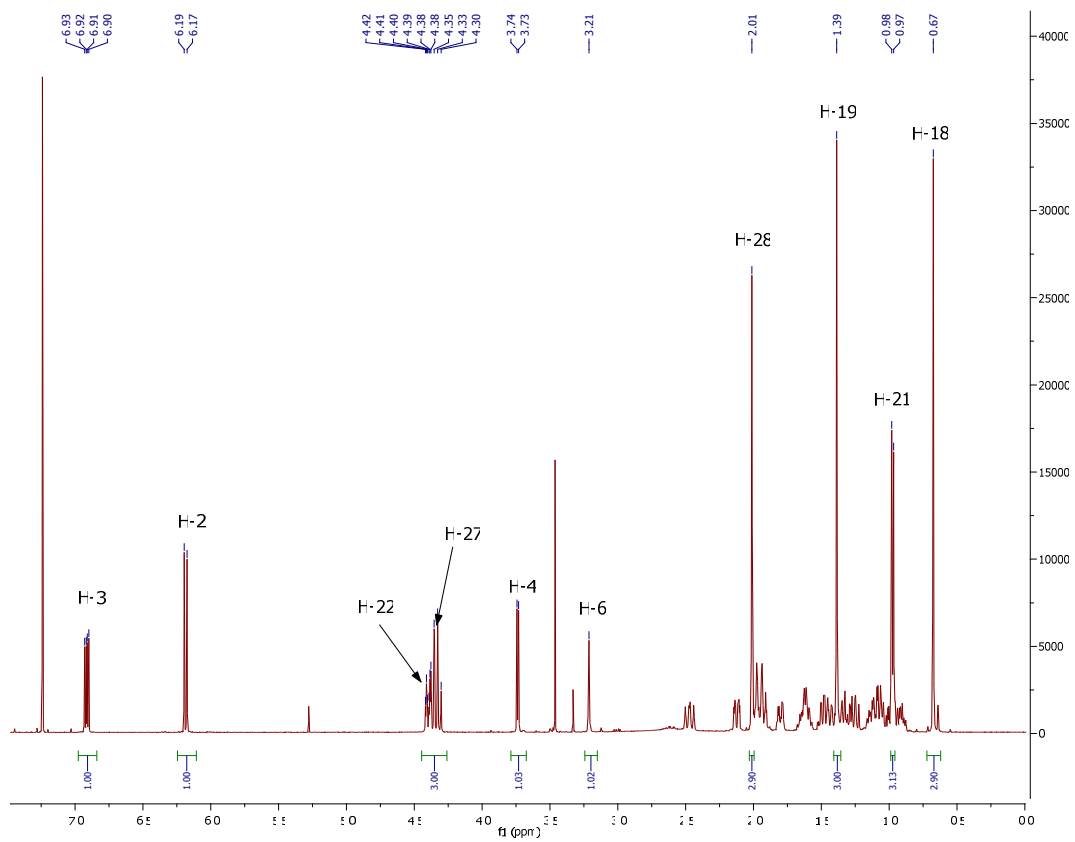
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S1. ^1H NMR spectrum (500 MHz, CDCl_3) of Withaferin A (**1**).



S2. Co-chromatography of an authentic sample from Chromadex and **1**.

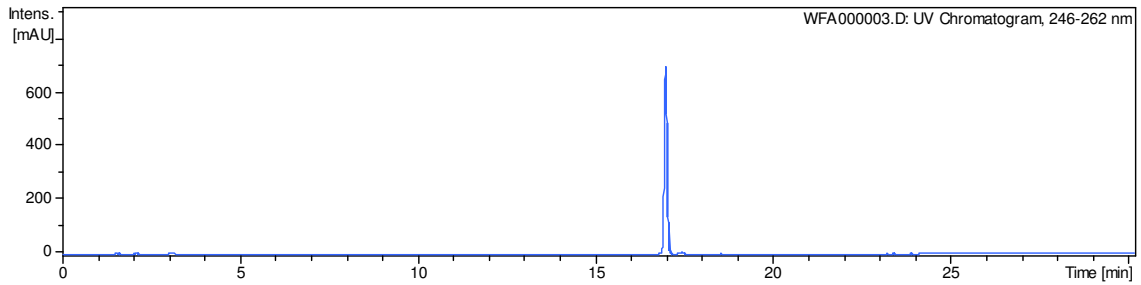
Mobile phase: A-water, B-Acetonitrile; isocratic 50% B for 30 min

Flow rate: 1 mL/minute

Injection Vol.: 10 μ L

Injection Conc.: 1.0 mg/mL in Methanol

Detection: 254 nm



S3. Mass and IR data of **1**.

Withaferin A. IR (thin film) ν_{\max} : 3421, 2942, 1678, 732 cm^{-1} ; HR-MS (m/z): 471.2730 $[\text{M} + \text{H}]^+$
493.2571 $[\text{M} + \text{Na}]^+$ (calc. for $\text{C}_{38}\text{H}_{38}\text{O}_6\text{Na}$, 493.2566 $\text{C}_{38}\text{H}_{39}\text{O}_6$, 493.2747).

S4. **Table 1.** IC₅₀ values of an extract and an active fraction of *Vassobia breviflora*^{a,b}

Extractions/Fractions	MDA1986	JMAR	UM-SCC-2	JHU011
Crude CHCl ₂ -MeOH (1:1) extract	1.1	7.3	0.94	1.1
Fraction 5 after SPE column	0.90	1.0	1.0	1.1

^a Data expressed in µg/ml.

^b For protocol used, see Experimental Section.