

Supplementary data

1. *Sophorae Flavescientis* Ait. identification

Sophorae Flavescientis Ait. identification was performed following Chinese Pharmacopoeia 2010.

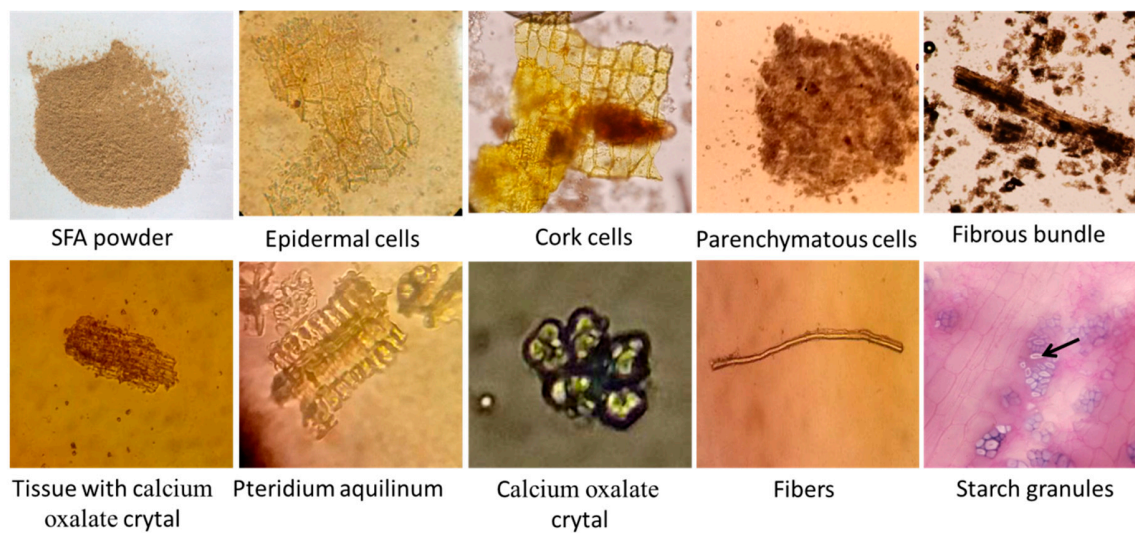


Figure S1. Pharmaceutical powder characterization.

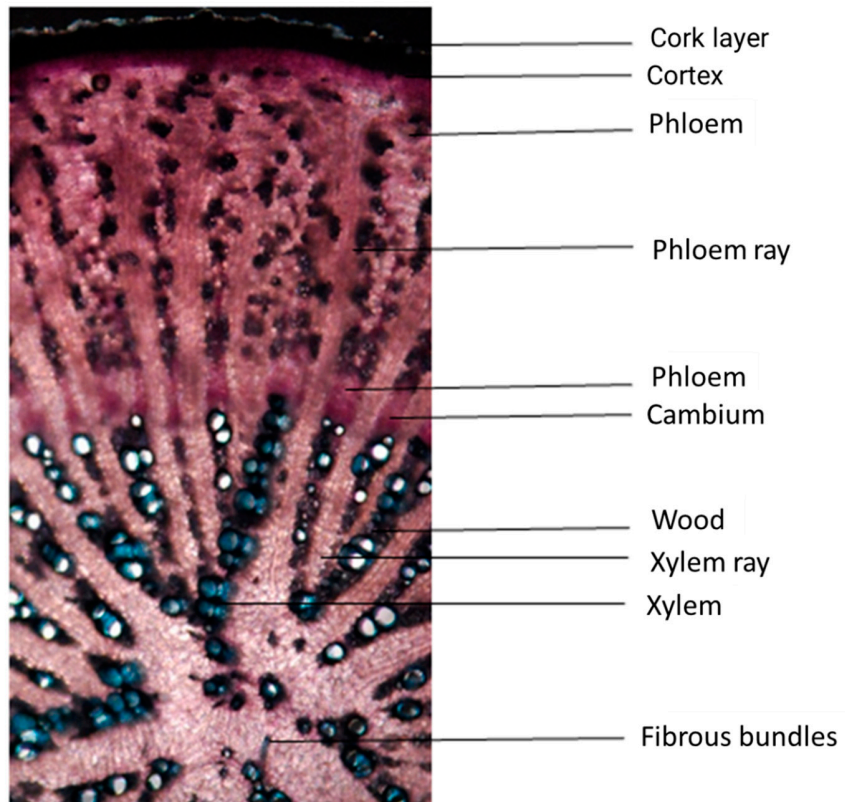


Figure S2. A cross-section of SFA root.

3. HepG2 growth curves

HepG2 cells were seeded in 96-well plates in different densities, 5×10^2 , 1×10^3 , 5×10^3 , 1×10^4 , 5×10^4 . Cells were seeded in triplicates. Cells then were incubated with 100 μ l fresh medium and 10 μ l WST-1 for 3.5 hours in CO₂ incubator. The O.D. value was measured at 450 nm by GloMax® Explorer Multimode Microplate Reader (Table S1). The standard curve of cell growth was performed in Figure S3.

Table S1. O.D. values of HepG2 cells.

No.	Cell density (cell number/well)				
	5×10^2	1×10^3	5×10^3	1×10^4	5×10^4
1	0.207	0.229	0.266	0.953	2.587
2	0.186	0.215	0.305	0.900	3.587
3	0.202	0.249	0.284	0.929	3.773

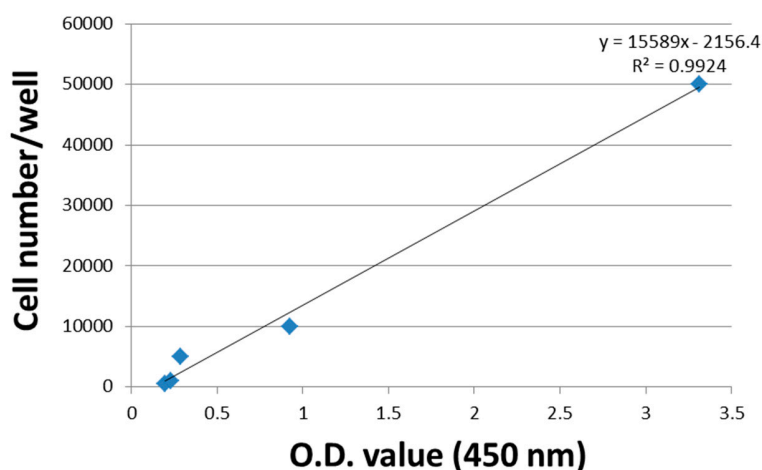


Figure S3. The WST-1 standard curve plotted to estimate the cell number for O.D. values obtained from WST-1 assay.

In experimental groups, HepG2 cells were treated with SFA-CHCl₃ extract in triplicates. HepG2 cells without SFA-CHCl₃ extract treatment were used as control group. The O.D. values were shown in Table S2. The HepG2 cell number was calculated from the O.D. values from Table S2 and WST-1 standard curve ($Y = 15589x - 2156.4$). From the cell number in SFA-CHCl₃ extract treatment groups (Table S3), the IC₅₀ value was calculated as 47.68 μ g/ml SFA-CHCl₃ extract for HepG2 cells.

Table S2. O.D. values of HepG2 cells treated with SFA-CHCl₃ extract.

No.	SFA-CHCl ₃ extract treatment (µg/ml)						
	Control	3.125	6.25	12.5	25	50	100
1	1.73	1.70	1.71	1.80	1.11	0.75	0.21
2	1.69	1.66	1.71	1.69	1.16	0.74	0.22
3	1.74	1.66	1.74	1.77	1.00	0.63	0.22

Table S3. Cell density of HepG2 cells treated with SFA-CHCl₃ extract.

No.	SFA-CHCl ₃ extract treatment (µg/ml)						
	Control	3.125	6.25	12.5	25	50	100
1	24813	24356	24558	25973	15084	9567	1155
2	24189	23676	24491	24195	15952	9452	1277
3	24969	23690	25024	25469	13423	7594	1227