Supporting information

Quantitative ^{1}H Nuclear Magnetic Resonance Method for Assessing the Purity of Dipotassium Glycyrrhizinate

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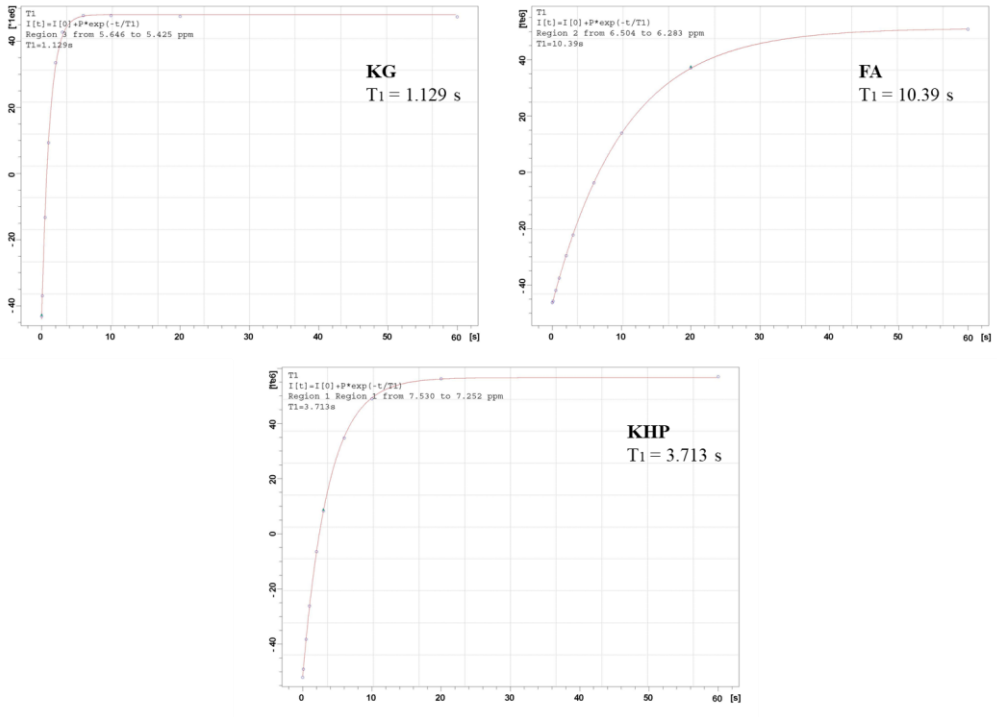

Figure S1. T_1 relaxation times of KG, FA and KHP.

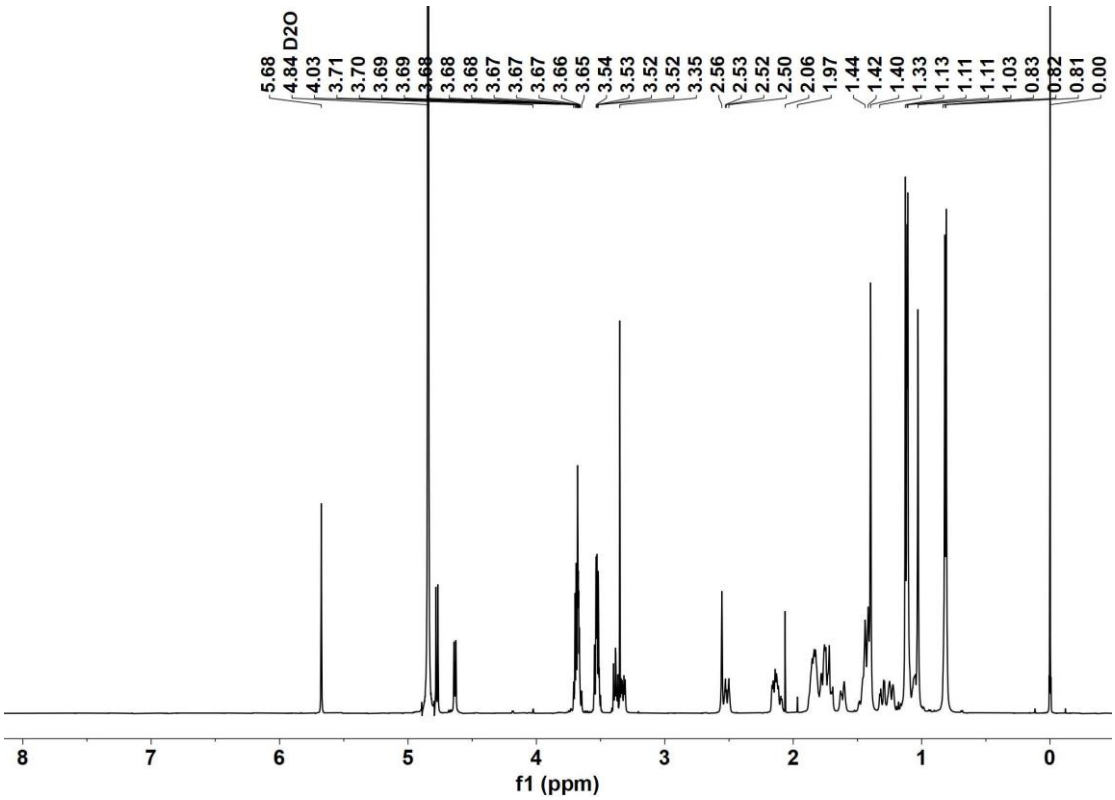

Figure S2. ^{1}H-NMR spectrum (500 MHz, D_2O) of KG

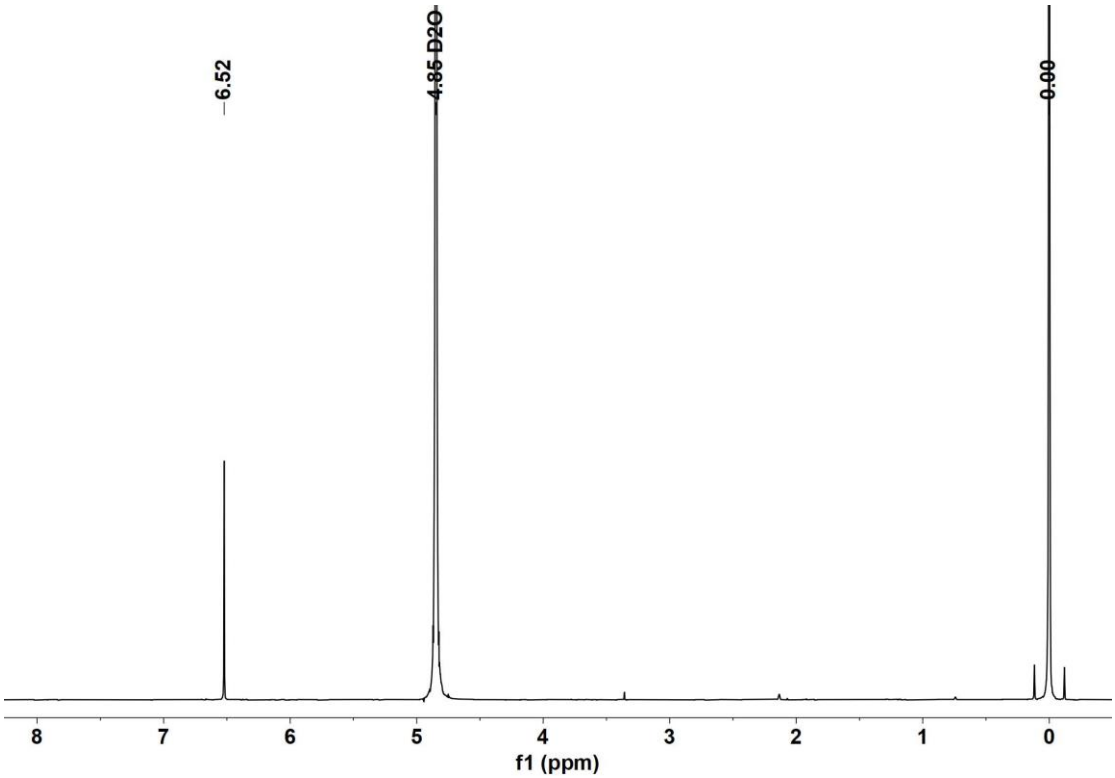

Figure S3. ^{1}H-NMR spectrum (500 MHz, D_2O) of FA

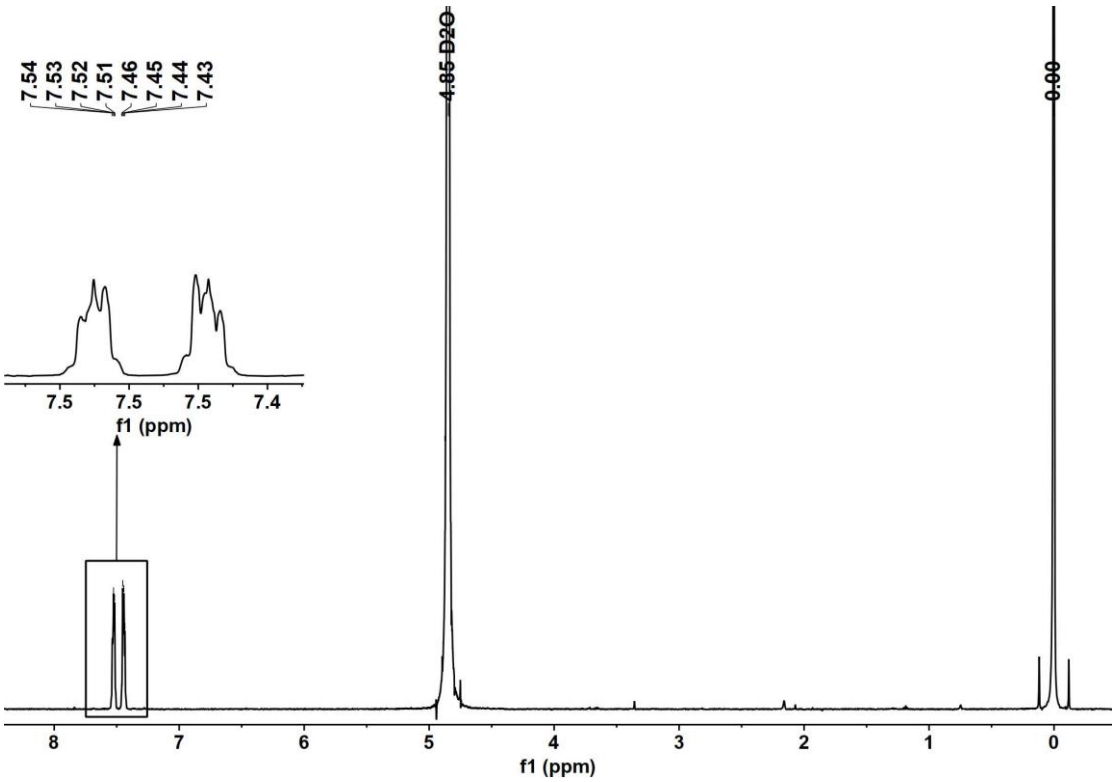

Figure S4. ^{1}H-NMR spectrum (500 MHz, D_2O) of KHP

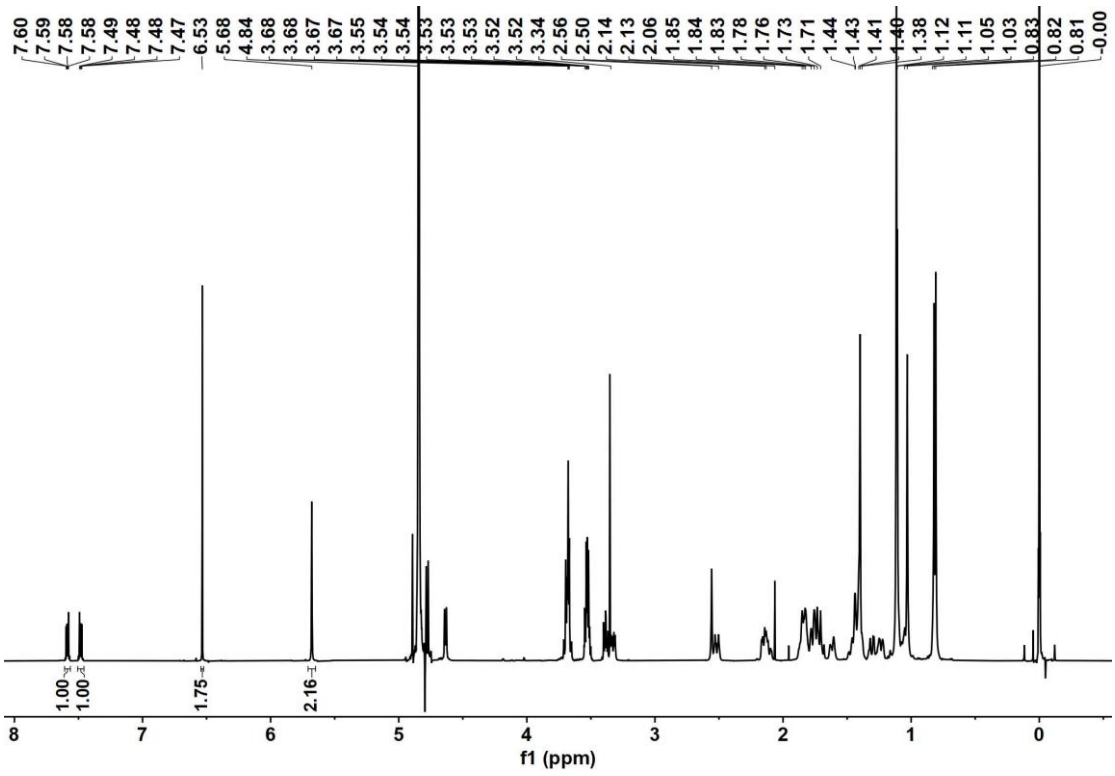

Figure S5. ^{1}H-NMR spectrum of the mixture of FA, KHP and KG in D_2O (500 MHz).

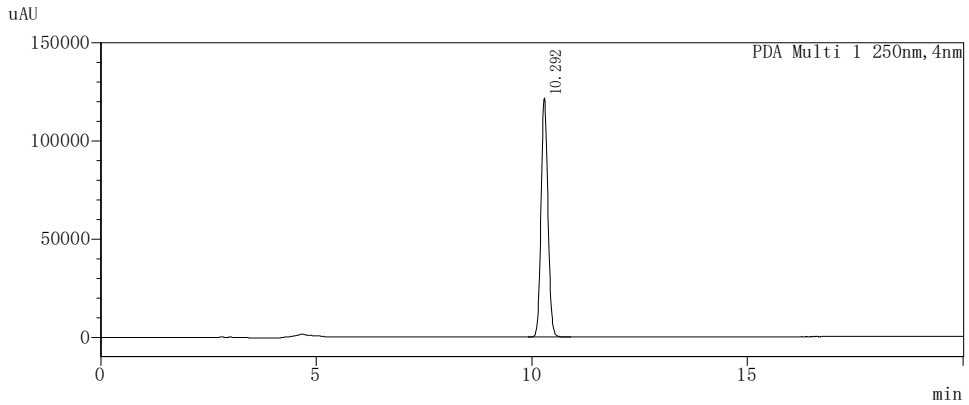

Figure S6. HPLC chromatogram of ammonium glycyrrhizinate reference substance

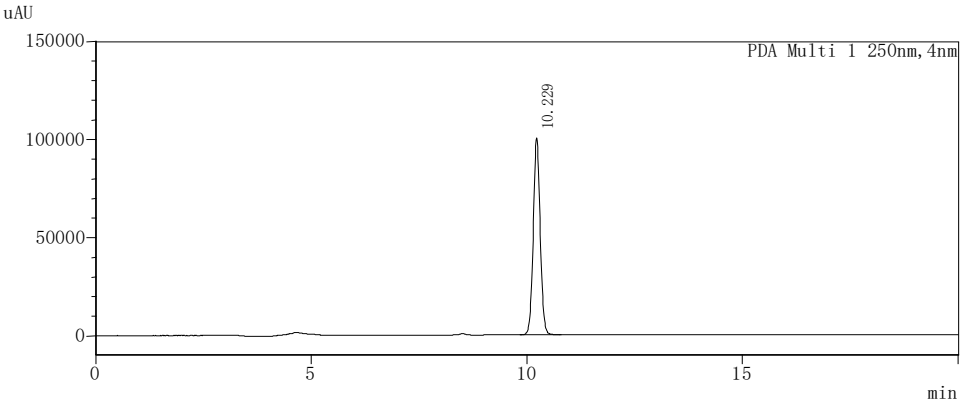

Figure S7. HPLC chromatogram of KG sample (batch no. 8060633)

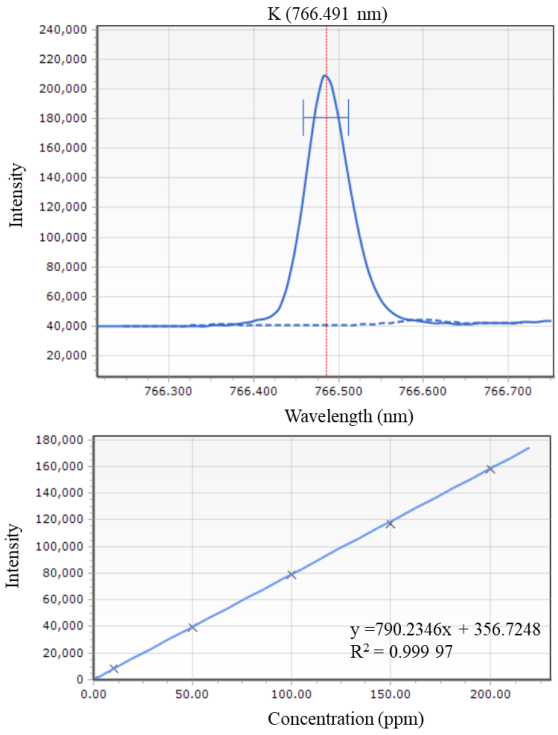

Figure S8. Calibration curve of K by ICP-OES.

Table S1. The integral areas of the internal standards (KHP and FA) and KG at different D1.

D1(s)	A_{KHP}	A_{FA}	A_{KG}
1	2.02	1.69	1.76
2	2.02	1.68	1.69
4	2.00	1.68	1.68
8	2.01	1.75	1.71
16	2.00	1.77	1.71
32	2.00	1.79	1.70
48	2.01	1.79	1.70
64	2.00	1.79	1.70
70	2.01	1.79	1.70

Table S2. Information on ICP-OES operating conditions.

Parameter	Value
Plasma gas flow	12.0 L/min
Auxiliary gas flow	1.0 L/min
Nebulizer gas flow	0.7 L/min
RF power	1200 watts
Plasma view	radial
Read delay	12 sec
Peristaltic pump flow	12 rpm
Spray chamber type	Cyclonic double-pass spray chamber
Nebulizer	Sea spray
Torch	Quartz
Wavelengths(nm)	766.491nm
Number of replicates	3
Observation height	8mm