

Supplement Materials

Inhibition of Aflatoxin Production by Citrinin and Non-Enzymatic Formation of a Novel Citrinin-Kojic Acid Adduct

Ichinomiya, M.; Fukushima-Sakuno, E.; Kawamoto, A.; Nakagawa, H.; Hatabayashi, H.; Nakajima, H.; Yabe, K.

Figure S1. High-resolution (HR)-ESI-TOFMS spectrum of CTN-KA adduct (positive ion mode).

Figure S2. High-resolution (HR)-ESI-TOFMS spectrum of CTN-KA adduct (negative ion mode).

Figure S3. ^{13}C -NMR spectrum of CTN-KA adduct (Acetone- d_6).

Figure S4. ^1H -NMR spectrum of CTN-KA adduct (Acetone- d_6).

Figure S5. HMQC spectrum of CTN-KA adduct (Acetone- d_6).

Figure S6. HMBC spectrum of CTN-KA adduct (Acetone- d_6).

Figure S7. NOESY spectrum of CTN-KA adduct (Acetone- d_6).

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

199 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

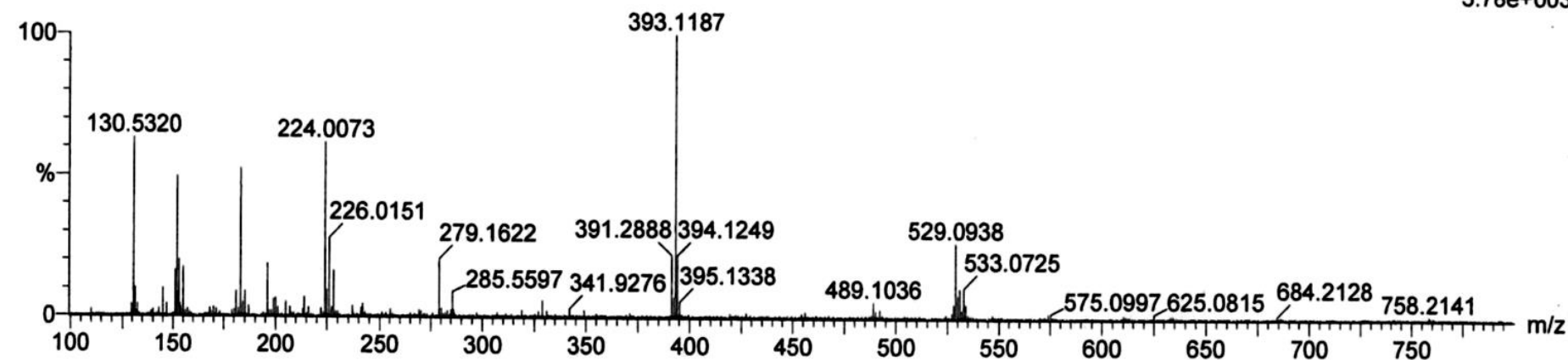
Elements Used:

C: 1-30 H: 1-40 N: 0-5 O: 1-10

120315004 38 (1.156)

1: TOF MS ES+

5.78e+003



Minimum: -1.5
Maximum: 100.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula			
393.1187	393.1186	0.1	0.3	9.5	76.5	0.2	C19	H21	O9	
	393.1199	-1.2	-3.1	14.5	78.1	1.7	C20	H17	N4	O5

Figure S1. High-resolution (HR)-ESI-TOFMS spectrum of CTN-KA adduct (positive ion mode).

Single Mass Analysis

Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

199 formula(e) evaluated with 3 results within limits (up to 50 best isotopic matches for each mass)

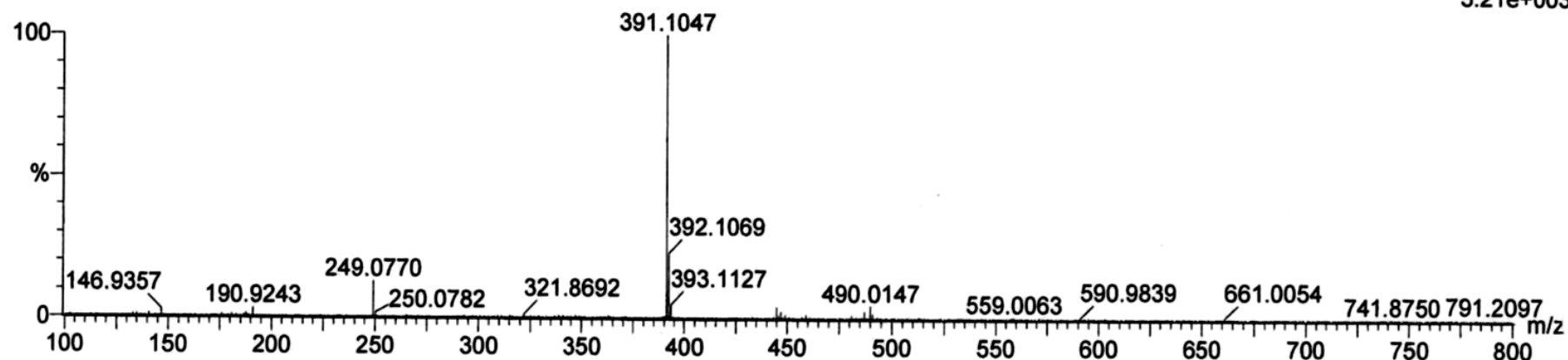
Elements Used:

C: 1-30 H: 1-40 N: 0-5 O: 1-10

120315004 64 (1.952)

2: TOF MS ES-

5.21e+003



Minimum: -1.5
Maximum: 100.0 10.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula
391.1047	391.1029	1.8	4.6	10.5	64.1	0.6	C19 H19 O9
	391.1042	0.5	1.3	15.5	64.4	0.9	C20 H15 N4 O5
	391.1083	-3.6	-9.2	19.5	70.3	6.7	C25 H15 N2 O3

Figure S2. High-resolution (HR)-ESI-TOFMS spectrum of CTN-KA adduct (negative ion mode).

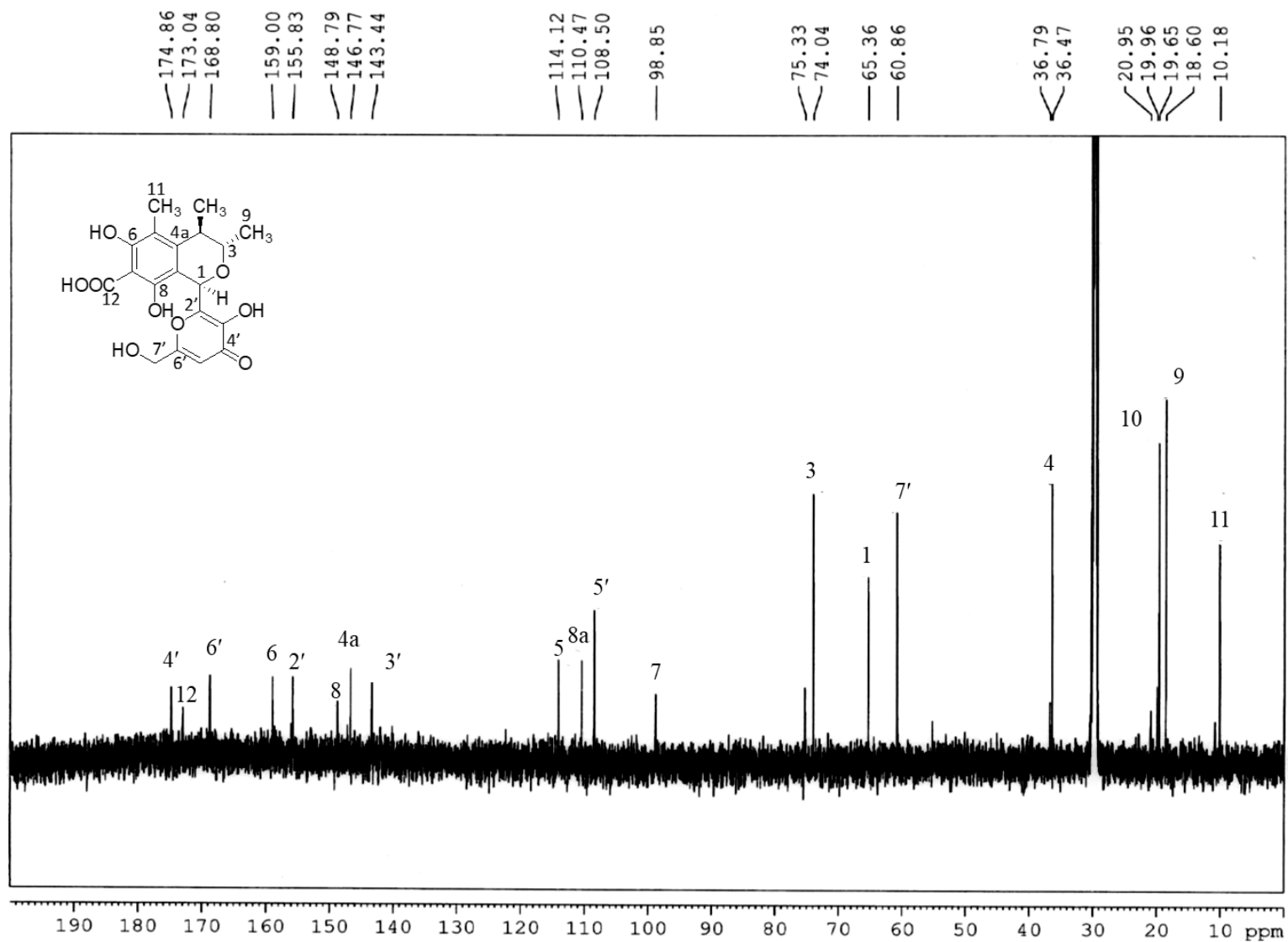


Figure S3. ^{13}C -NMR spectrum of CTN-KA adduct ($\text{Acetone-}d_6$).

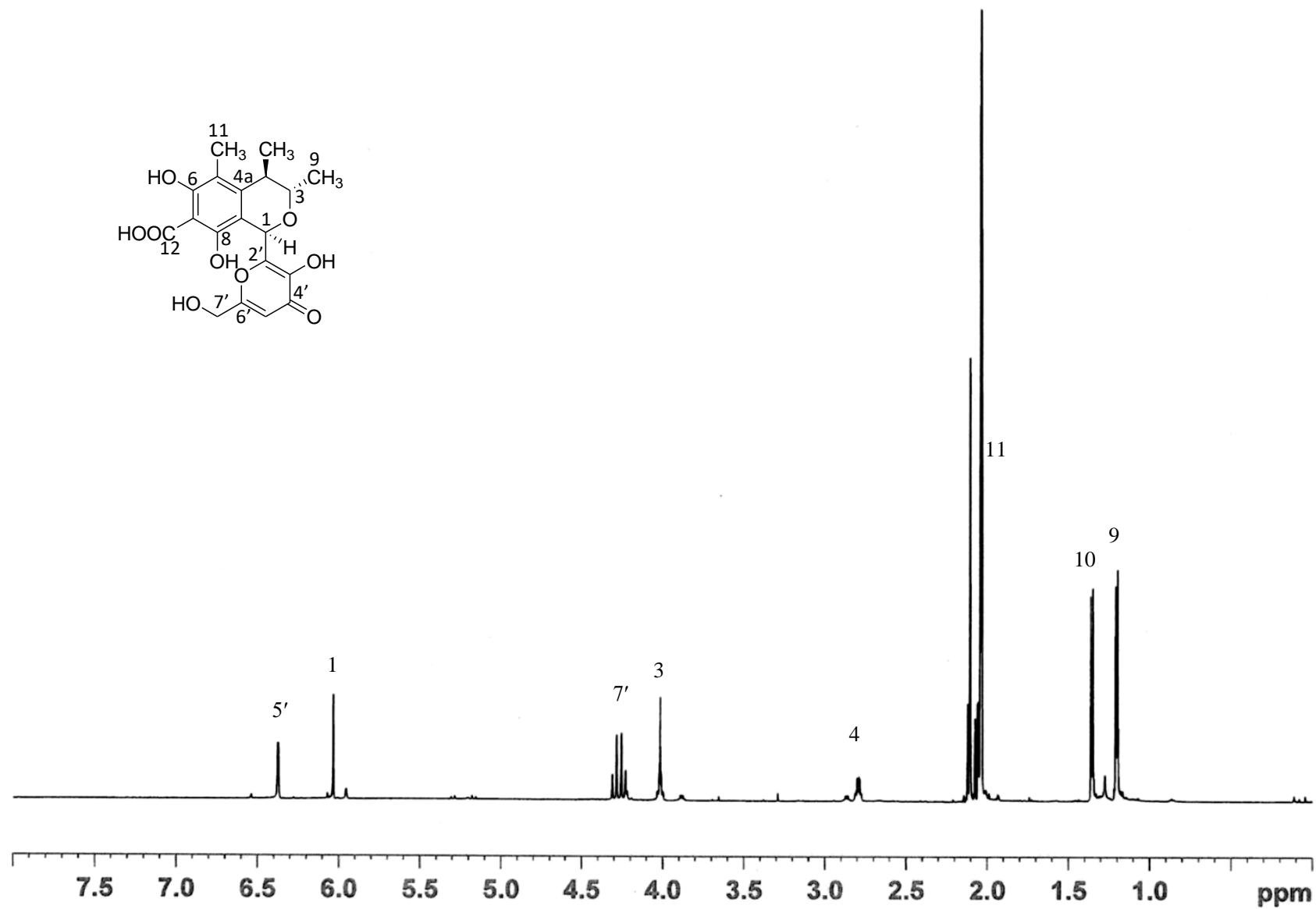


Figure S4. ^1H -NMR spectrum of CTN-KA adduct ($\text{Acetone-}d_6$).

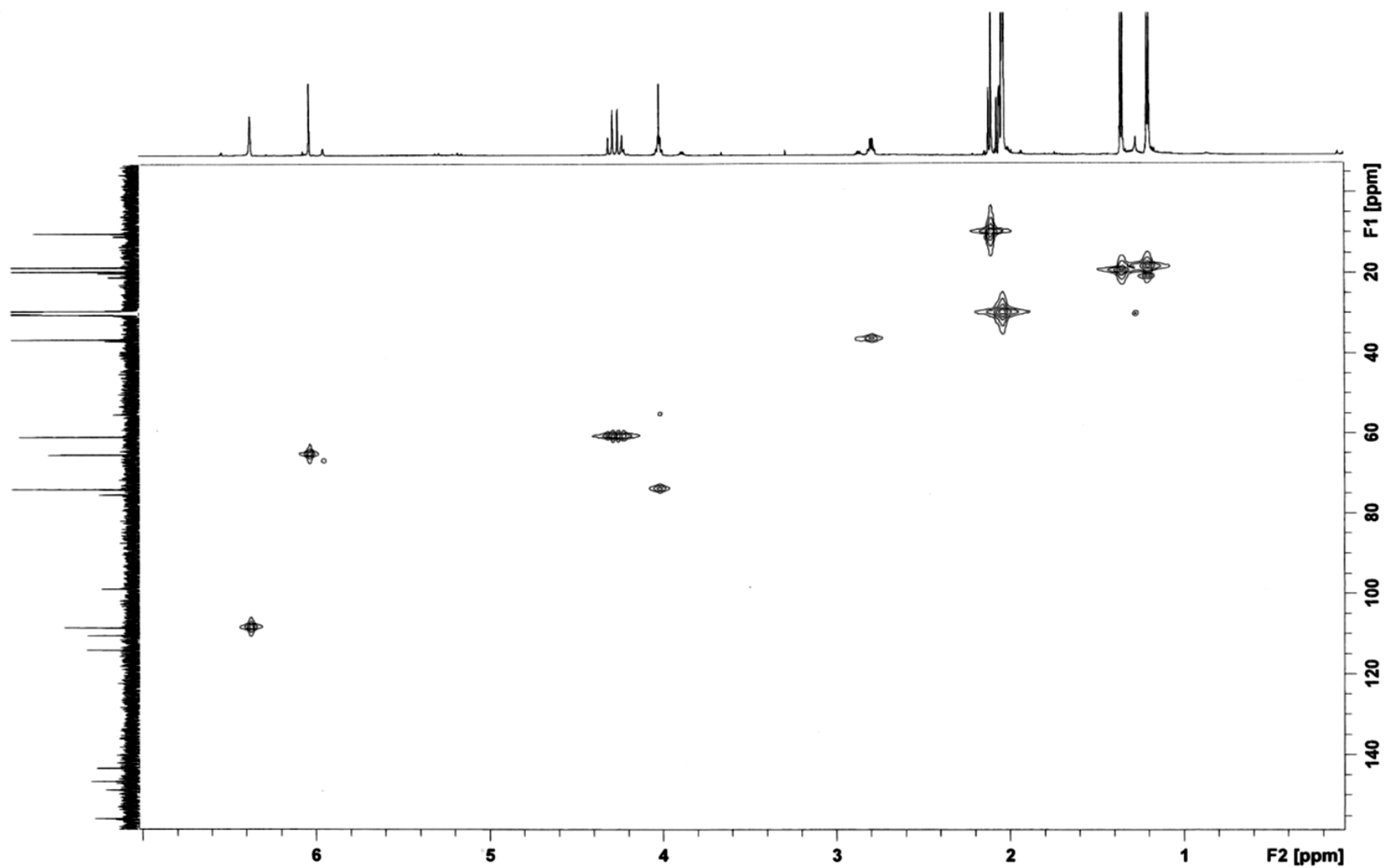


Figure S5. HMQC spectrum of CTN-KA adduct ($\text{Acetone-}d_6$).

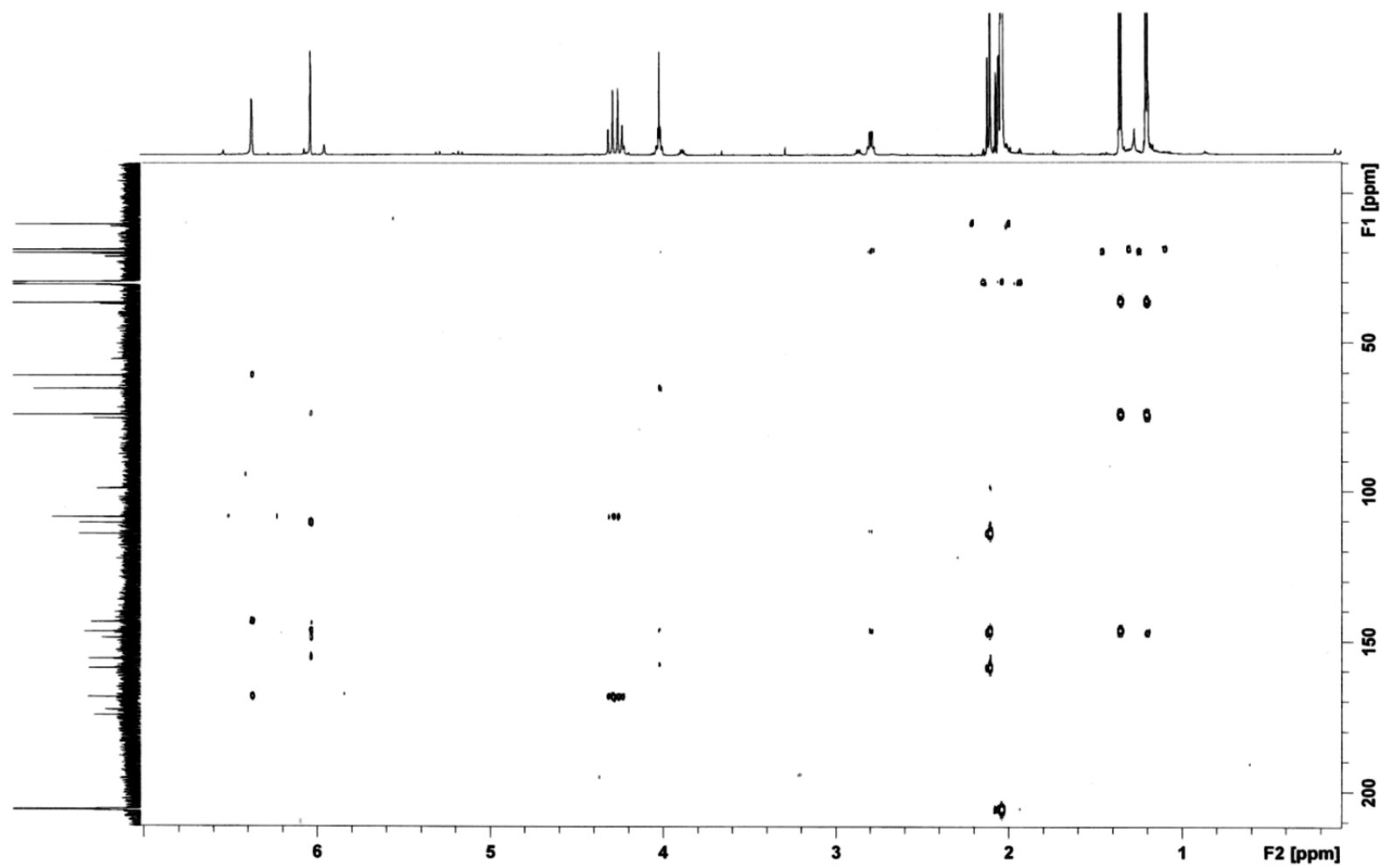


Figure S6. HMBC spectrum of CTN-KA adduct (Acetone- d_6).

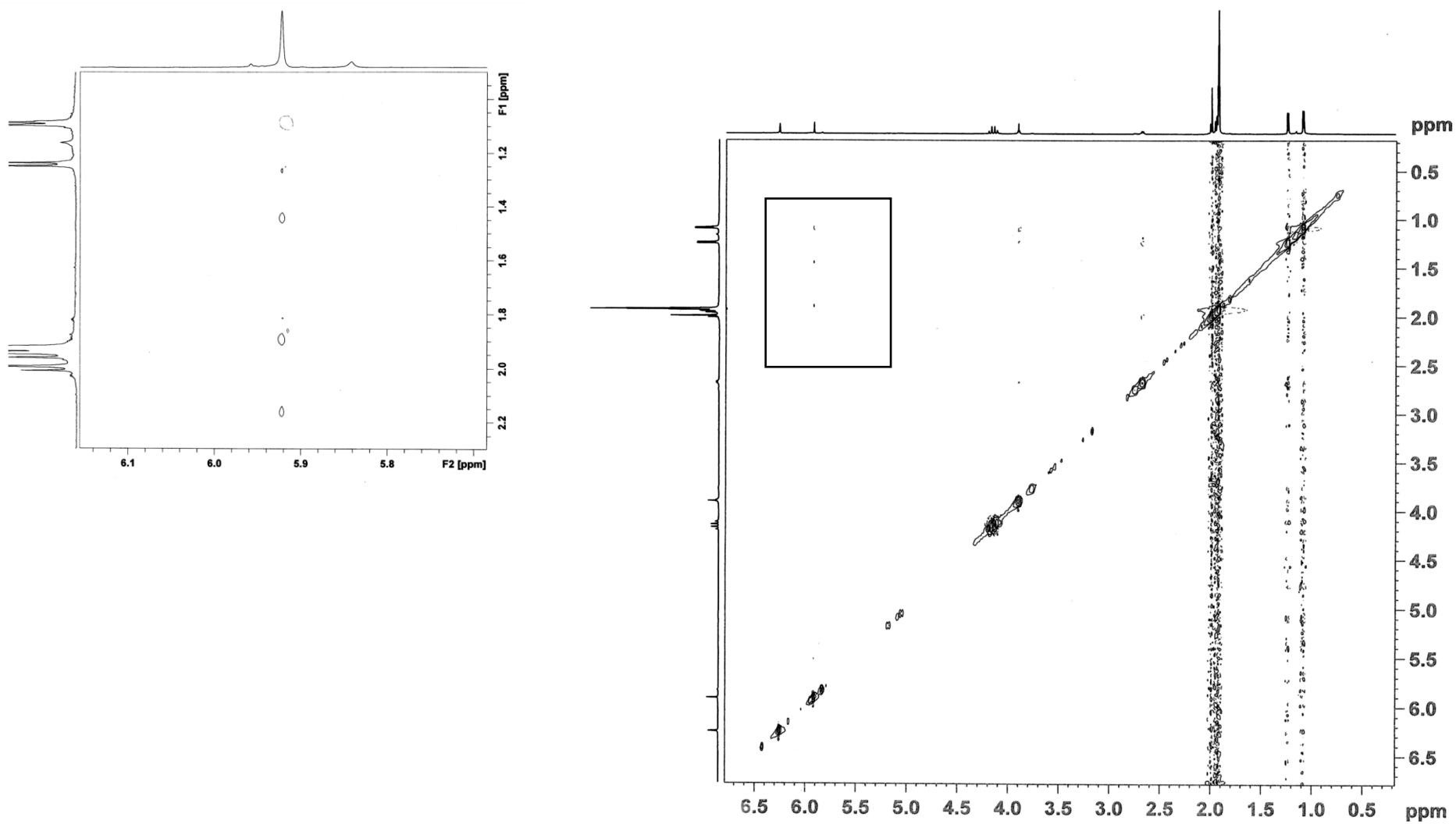


Figure S7. NOESY spectrum of CTN-KA adduct (Acetone- d_6).