

Supplemental Materials

Table S1. Real-time polymerase chain reaction (RT-PCR) primer sequences.

Gene	Forward Primer (5'-3')	Reverse Primer (5'-3')	Base Pairs	GI Identifier
Iron Metabolism				
DcytB	CATGTGCATTCTCTTCCAAAGTC	CTCCTTGGTGACCGCATTAT	103	20380692
DMT1	TTGATTGAGAGCCTCCCATTAG	GCGAGGAGTAGGCTTGTATTT	101	206597489
Ferroportin	CTCAGCAATCACTGGCATCA	ACTGGGCAACTCCAGAAATAAG	98	61098365
Zinc Metabolism				
ZIP9	CTAAGCAAGAGCAGCAAAGAAG	CATGAAGTGTGGCAACGTAAG	100	237874618
ZnT1	GGTAACAGAGCTGCCTTAAGT	GGTAACAGAGCTGCCTTAAGT	105	54109718
ZnT7	GGAAGATGTCAGGATGGTTCA	CGAAGGACAAATTGAGGCAAAG	87	56555152
Inflammatory Response				
NF- κ B1	CACAGCTGGAGGGAAGTAAAT	TTGAGTAAGGAAGTGAGGTTGAG	100	2130627
TNF- α	GACAGCCTATGCCAACAAGTA	TTACAGGAAGGGCAACTCATC	109	53854909
IL8	TCATCCATCCCAAGTTCATTCA	GACACACTTCTCTGCCATCTT	105	395872
BBM Functionality				
SGLT-1	GCATCCTTACTCTGTGGTACTG	TATCCGCACATCACACATCC	106	8346783
SI	CCAGCAATGCCAGCATATTG	CGGTTTCTCCTTACCACTTCTT	95	2246388
AP	CGTCAGCCAGTTTGACTATGTA	CTCTCAAAGAAGCTGAGGATGG	138	45382360
Muc2	CCTGCTGCAAGGAAGTAGAA	GGAAGATCAGAGTGGTGCATAG	272	423101
18S	GCAAGACGAAGTAAAGCGAAAG	TCGGAAGTACGACGGTATCT	100	7262899

DcytB, Duodenal cytochrome B; DMT1, Divalent metal transporter 1; ZIP9, Zinc Transporter 9; ZnT1, Zinc transporter 1; ZnT7, Zinc transporter 7; SGLT-1, Sodium-glucose transporter 1; SI, Sucrose isomaltase; AP, amino peptidase; Muc2, Mucin 2; NF- κ B, Nuclear factor- κ B1; TNF- α , Tumor necrosis factor 1; IL8, Interleukin 8; 18S rRNA, 18S Ribosomal subunit.

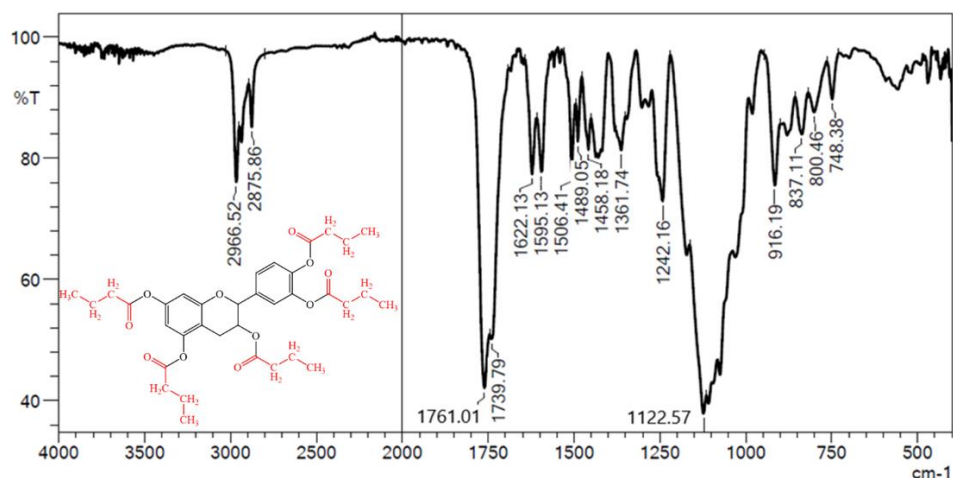


Figure S1. FTIR of Catechin pentabutanoate.

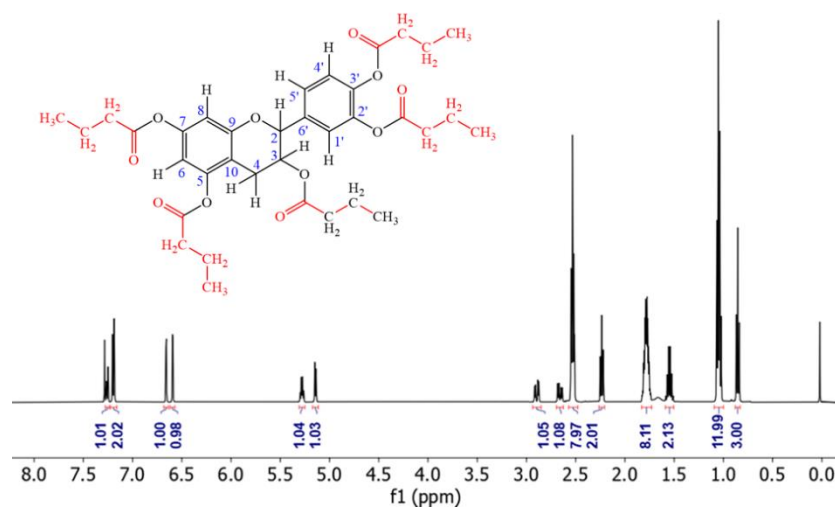


Figure S2. ^1H NMR of catechin pentabutanoate in CDCl_3 .

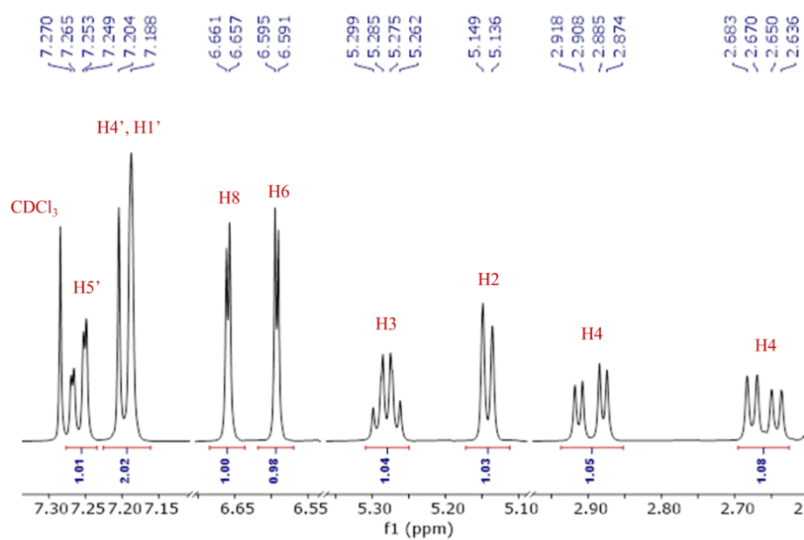


Figure S3. Expanded (7.27-2.64 ppm) ^1H NMR of catechin pentabutanoate in CDCl_3 .

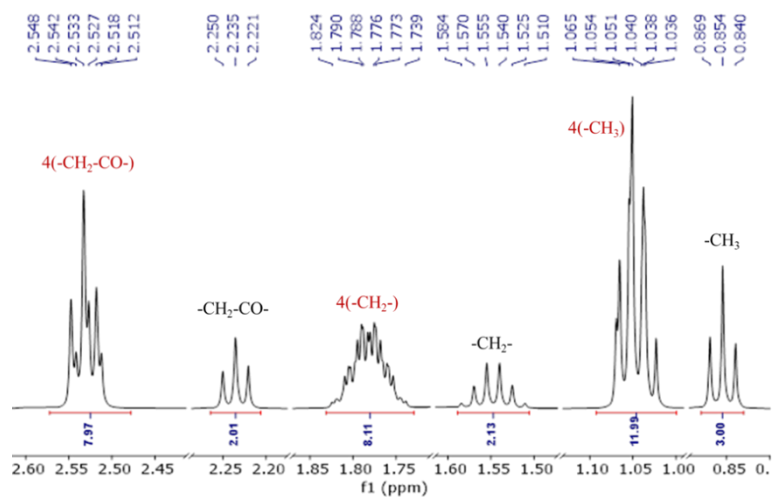


Figure S4. Expanded (2.55-0.84 ppm) ^1H NMR of catechin pentabutanoate in CDCl_3 .

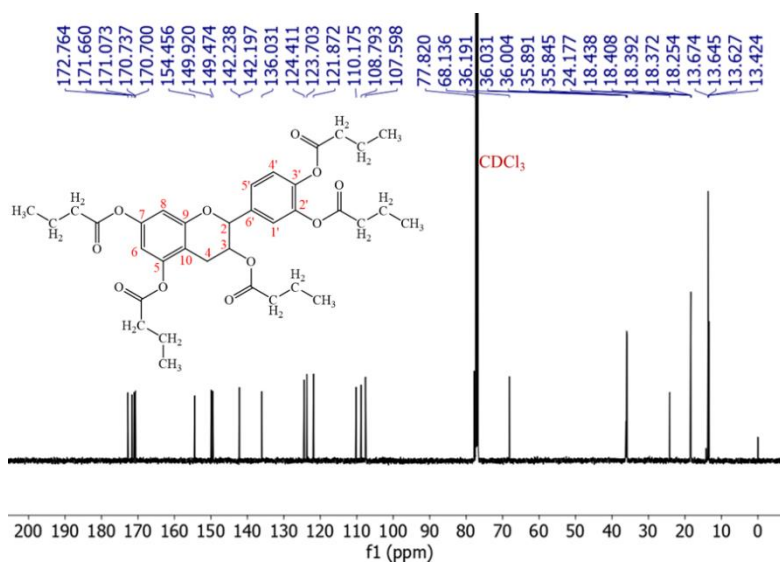


Figure S5. ^{13}C NMR of catechin pentabutanoate in CDCl_3 .

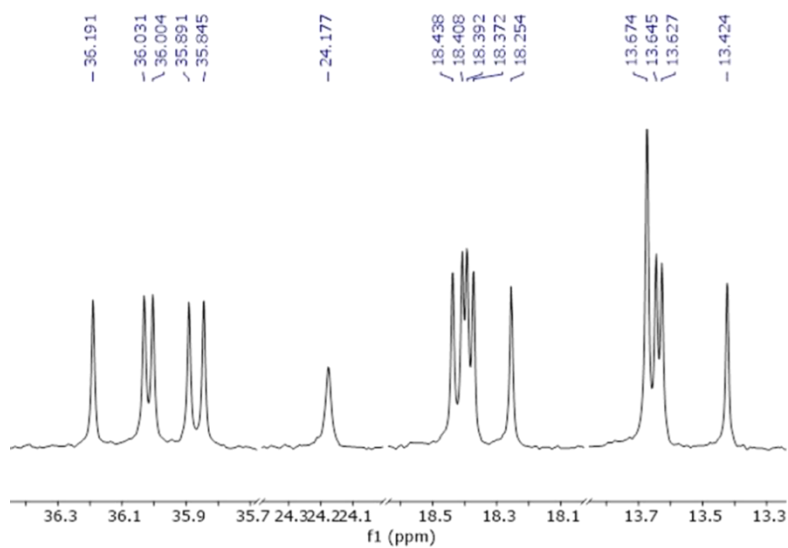


Figure S6. Expanded ^{13}C NMR of catechin pentabutanoate in CDCl_3

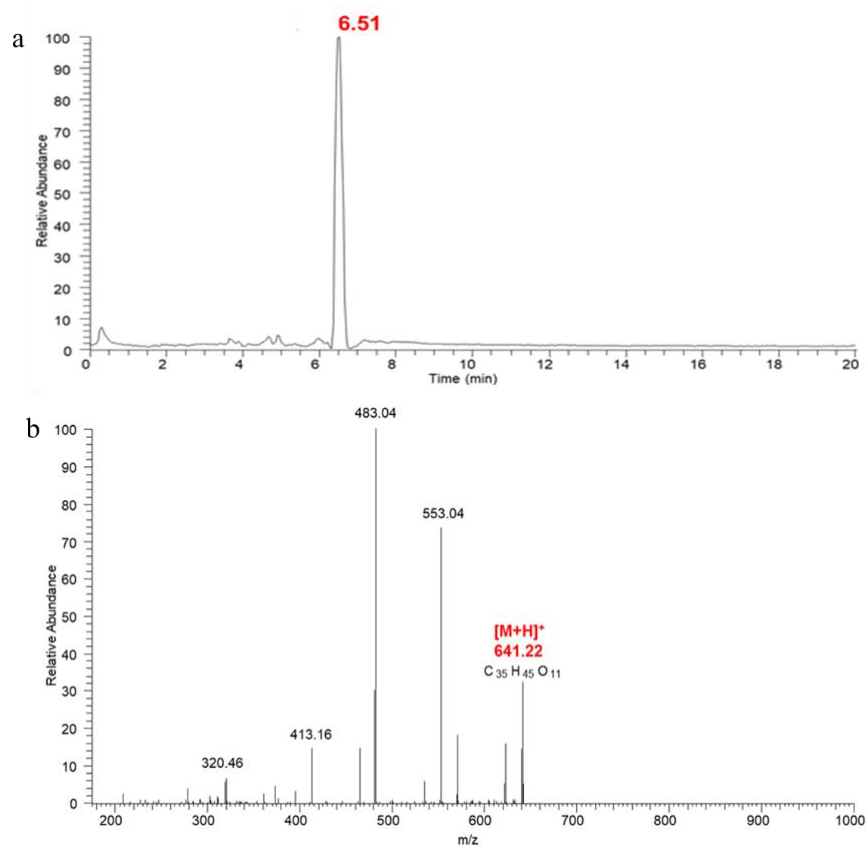


Figure S7. SRM LC-MS of catechin pentabutanoate. a) SRM LC of catechin pentabutanoate. b) Mass spectrum of catechin pentabutanoate.

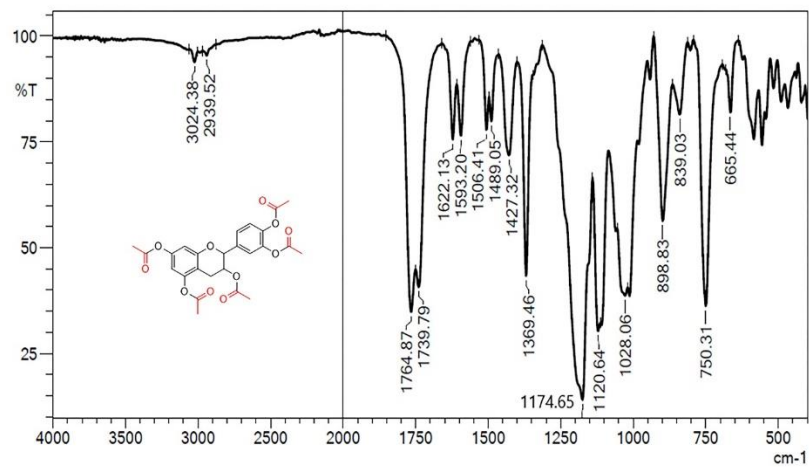


Figure S8. FTIR of Catechin pentaacetate.

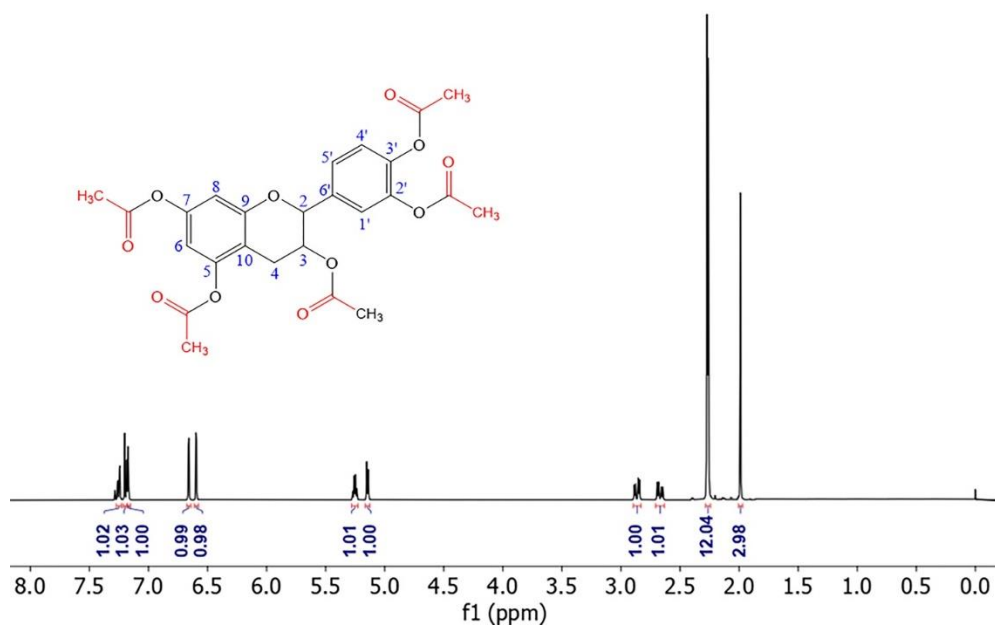


Figure S9. ¹H NMR of catechin pentaacetate in CDCl₃.

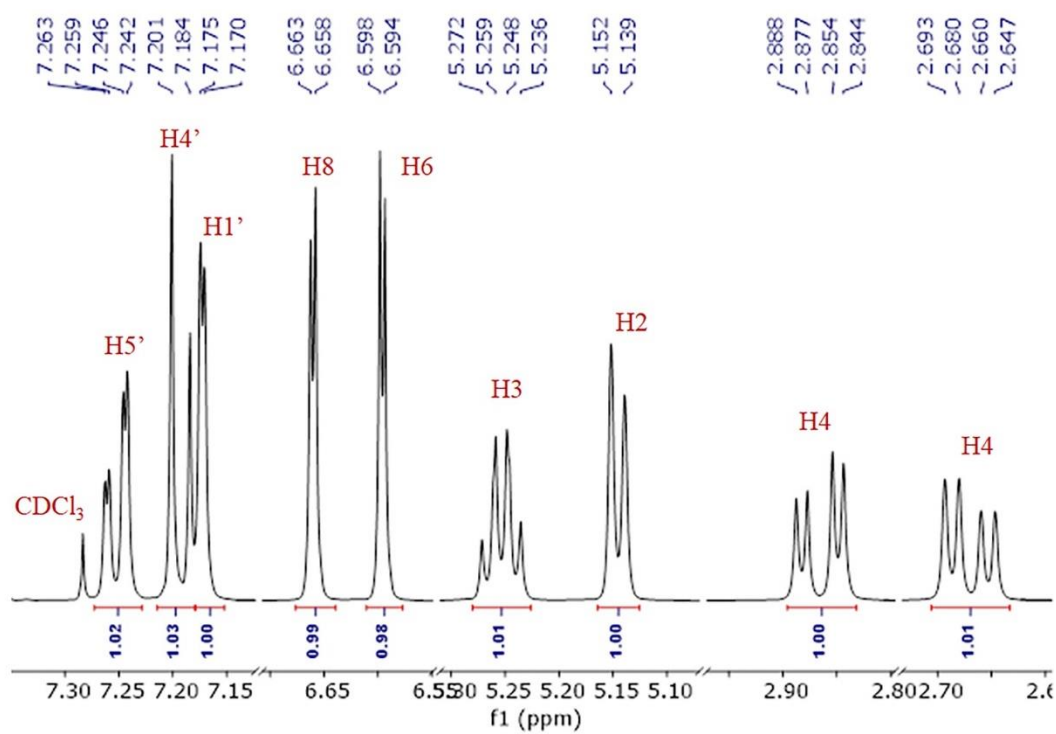


Figure S10. Expanded ¹H NMR of catechin pentaacetate in CDCl₃.

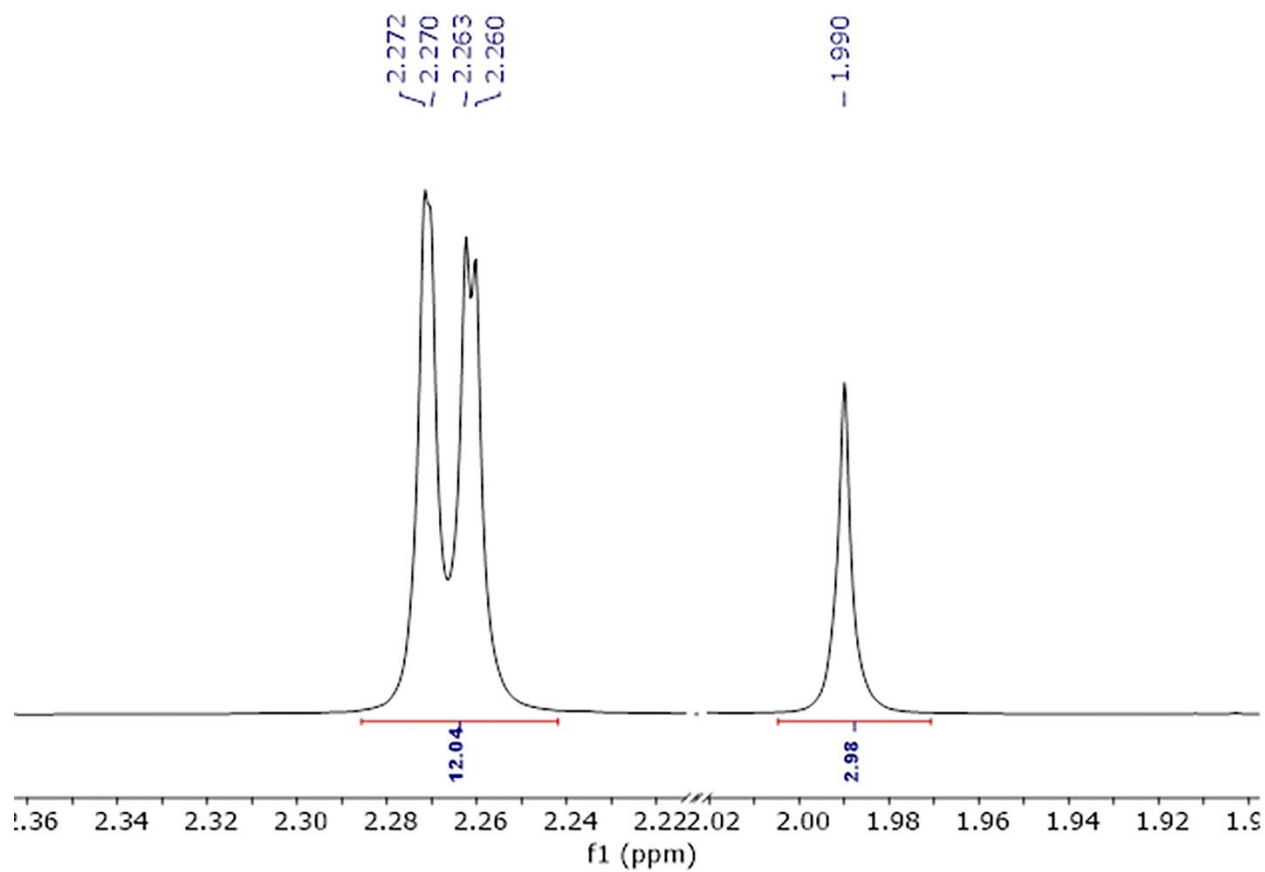


Figure S11. Expanded ^1H NMR of catechin pentaacetate in CDCl_3 .

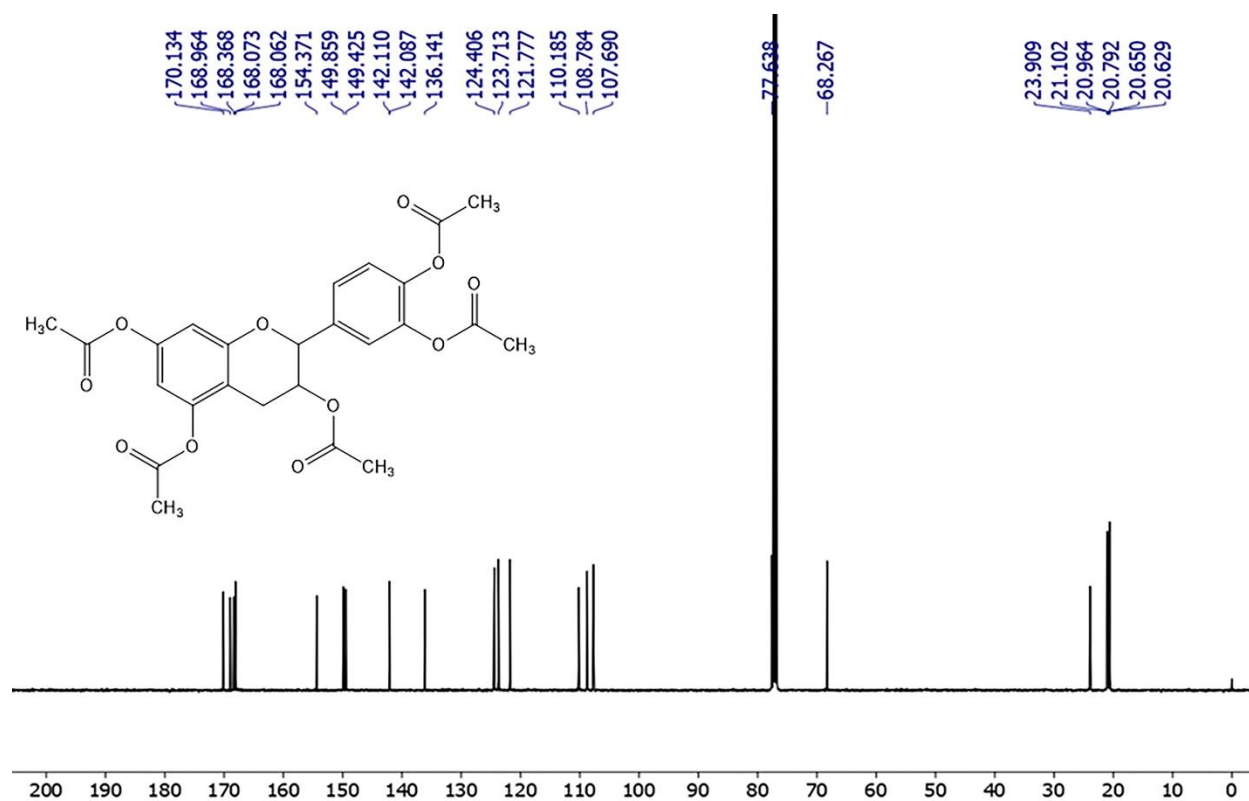


Figure S12. ^{13}C NMR of catechin pentaacetate in CDCl_3 .