

**Modulation of Estrogen-Related Receptors Subtype Selectivity: Conversion of an ERR β / γ
Selective Agonist to ERR α / β / γ Pan Agonists**

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(E)-N'-Benzylidenebenzohydrazide (10) [1].

Pale Yellow crystals; yield: 89% (EtOH). Mp 214-215 °C (Lit. mp 210-212 °C) [1]. LC/MS m/z: 225 [M+H⁺].

(E)-N'-(4-(Dimethylamino)benzylidene)benzohydrazide (11)[2].

Orange crystals; yield: 84% (EtOH). Mp 173-175 °C (Lit. mp 175-176 °C) [2]. LC/MS m/z: 268 [M+H⁺].

(E)-N'-(4-Chlorobenzylidene)benzohydrazide (12)[3]

White crystals; yield: 88% (EtOH). Mp 166-167 °C (Lit. mp 164-165 °C) [3]. LC/MS m/z: 259 [M+H⁺].

(E)-N'-(2-Hydroxybenzylidene)benzohydrazide (13)[4]

White crystals; yield: 69% (EtOH). Mp 160-162 °C (Lit. mp 163-164 °C)[4]. LC/MS m/z: 241 [M+H⁺].

(E)-N'-(4-Hydroxybenzylidene)benzohydrazide (14)[5]

Pale brown crystals; yield: 75% (EtOH). Mp 263-265 °C (Lit. mp 267-268 °C)[5]. LC/MS m/z: 241 [M+H⁺].

(E)-N'-(4-Methoxybenzylidene)benzohydrazide (15)[6]

White crystals; yield: 83% (EtOH). Mp 159-160 °C (Lit. mp 158 °C) [6]. LC/MS m/z: 255 [M+H⁺].

(E)-N'-(3-Nitrobenzylidene)benzohydrazide (17)[6]

Yellow crystals; yield: 86% (EtOH). Mp 189-190 °C (Lit. mp 188 °C)[6]. LC/MS m/z: 270 [M+H⁺].

(E)-N'-(4-Nitrobenzylidene)benzohydrazide (18)[6]

Yellow crystals; yield: 88% (EtOH). Mp 236-238 °C (Lit. mp 240-242 °C)[6]. LC/MS m/z: 270 [M+H⁺].

(E)-N'-Benzylidene-2-hydroxybenzohydrazide (19)[7]

White crystals; yield: 90% (EtOH). Mp 228-229 °C (Lit. mp 231 °C)[7]. LC/MS m/z: 241 [M+H⁺].

(E)-N'-Benzylidene-4-chlorobenzohydrazide (20)[6]

White crystals; yield: 87% (EtOH). Mp 226-228 °C (Lit. mp 230 °C)[6]. LC/MS m/z: 259 [M+H⁺].

(E)-N'-Benzylidene-4-bromobenzohydrazide (21)[8]

White crystals; yield: 81% (EtOH). Mp 236-238 °C (Lit. mp 235-237 °C)[8]. LC/MS m/z: 303 [M+H⁺].

(E)-N'-Benzylidene-4-nitrobenzohydrazide (22)[9]

Pale yellow crystals; yield: 81% (EtOH). Mp 254-256 °C (Lit. mp 259 °C)[9]. LC/MS m/z: 270 [M+H⁺].

(E)-N'-Benzylidene-2-methylbenzohydrazide (23)[10]

White crystals; yield: 77% (EtOH). Mp 169-171 °C (Lit. mp 173-174 °C)[10]. LC/MS m/z: 239 [M+H⁺].

(E)-N'-(4-(Dimethylamino)benzylidene)-2-methylbenzohydrazide (25)[11]

Yellow crystals; yield: 71% (EtOH). Mp 149-151 °C (Lit. mp 151-152 °C). LC/MS m/z: 282 [M+H⁺].

(E)-4-Chloro-N'-(4-chlorobenzylidene)benzohydrazide (26)[10]

White crystals; yield: 82% (EtOH). Mp 219-220 °C (Lit. mp 220-221 °C)[10]. LC/MS m/z: 293 [M+H⁺].

(E)-2-Chloro-N'-(2-hydroxybenzylidene)benzohydrazide (28)[12]

Yellow crystals; yield: 69% (EtOH). Mp 142-143 °C (Lit. mp 145 °C).[12] LC/MS m/z: 275 [M+H⁺].

(E)-N'-(4-Hydroxybenzylidene)-2-methylbenzohydrazide (30)[13]

Colorless microcrystals; yield: 72% (EtOH). Mp 155-157 °C. LC/MS m/z: 255 [M+H⁺].

(E)-4-Chloro-N'-(2-hydroxybenzylidene)benzohydrazide (31)[14]

Yellow crystals; yield: 76% (EtOH). Mp 236-238 °C (Lit. mp 240 °C)[14]. LC/MS m/z: 275 [M+H⁺].

(E)-4-Bromo-N'-(2-hydroxybenzylidene)benzohydrazide (32)[15]

Yellow crystals; yield: 79% (EtOH). Mp 249-251 °C. LC/MS m/z: 319 [M+H⁺].

(E)-N'-Benzylidene-2-phenylacetohydrazide (34)[16]

Colorless solid; yield: 58% (EtOH). Mp 151-153 °C (Lit. mp 154 °C). LC/MS m/z: 239 [M+H⁺].

(E)-4-Nitro-N'-(4-nitrobenzylidene)benzohydrazide (36)[17]

Orange yellow crystals; yield: 63% (EtOH). Mp 160-162 °C. LC/MS m/z: 315 [M+H⁺].

(E)-4-Nitro-N'-(3-nitrobenzylidene)benzohydrazide (37)[18]

Orange yellow crystals; yield: 63% (EtOH). Mp 189-190 °C. LC/MS m/z: 315 [M+H⁺].

(E)-N'-Ethylidenebenzohydrazide (39)[1]

Yellow crystals; yield: 75% (EtOH). Mp 154-156 °C (Lit. mp 159-162 °C)[1]. LC/MS m/z: 163 [M+H⁺].

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N'-((1E,2E)-3-Phenylallylidene)benzohydrazide (40)[19]

Yellow crystals; yield: 53% (EtOH). Mp 186-189 °C (Lit. mp 192-194 °C)[19]. LC/MS m/z: 251 [M+H⁺].

***N'*-((1*E*,2*E*)-3-(4-(Dimethylamino)phenyl)allylidene)benzohydrazide (41)**[20]

Yellow solid; yield: 49% (EtOH). Mp 186-189 °C (Lit. mp 192-194 °C)[19]. LC/MS m/z: 294 [M+H⁺].

***(E)*-*N'*-(Furan-2-ylmethylene)benzohydrazide (43)**[21]

Yellow solid; yield: 83% (EtOH). Mp 129-130 °C (Lit. mp 133.8 °C)[21]. LC/MS m/z: 215 [M+H⁺].

***(E)*-*N'*-((5-Methylfuran-2-yl)methylene)benzohydrazide (44)**[21]

Yellow solid; yield: 85% (EtOH). Mp 122-123 °C. LC/MS m/z: 229 [M+H⁺].

***(E)*-*N'*-(Quinolin-2-ylmethylene)benzohydrazide (45)**[21]

Yellow solid; yield: 80% (EtOH). Mp 172-174 °C (Lit. mp 170 °C)[21]. LC/MS m/z: 276 [M+H⁺].

***(E)*-*N'*-(Quinolin-4-ylmethylene)benzohydrazide (46)**[21]

Yellow solid; yield: 84% (EtOH). Mp 214-216 °C (Lit. mp 218 °C)[22]. LC/MS m/z: 276 [M+H⁺].

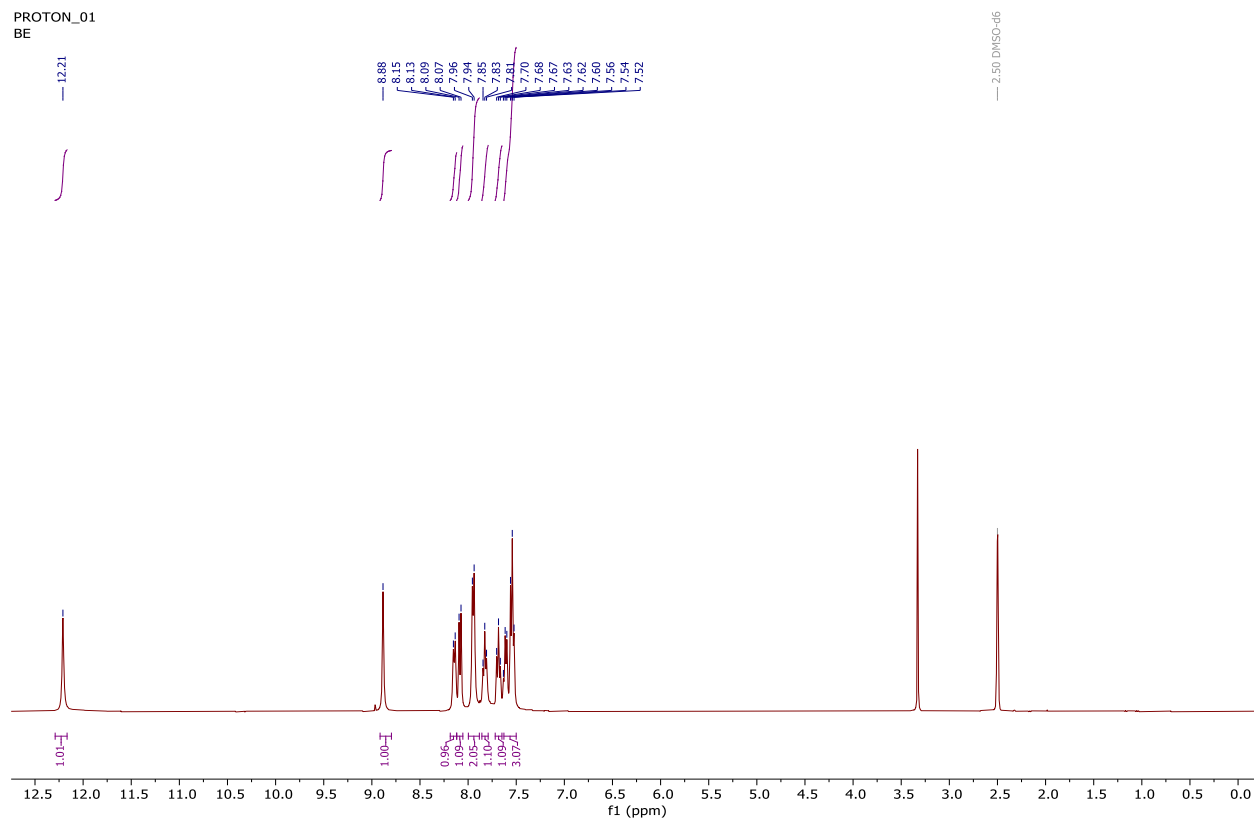


Figure S1. ^1H NMR of compound **16**.

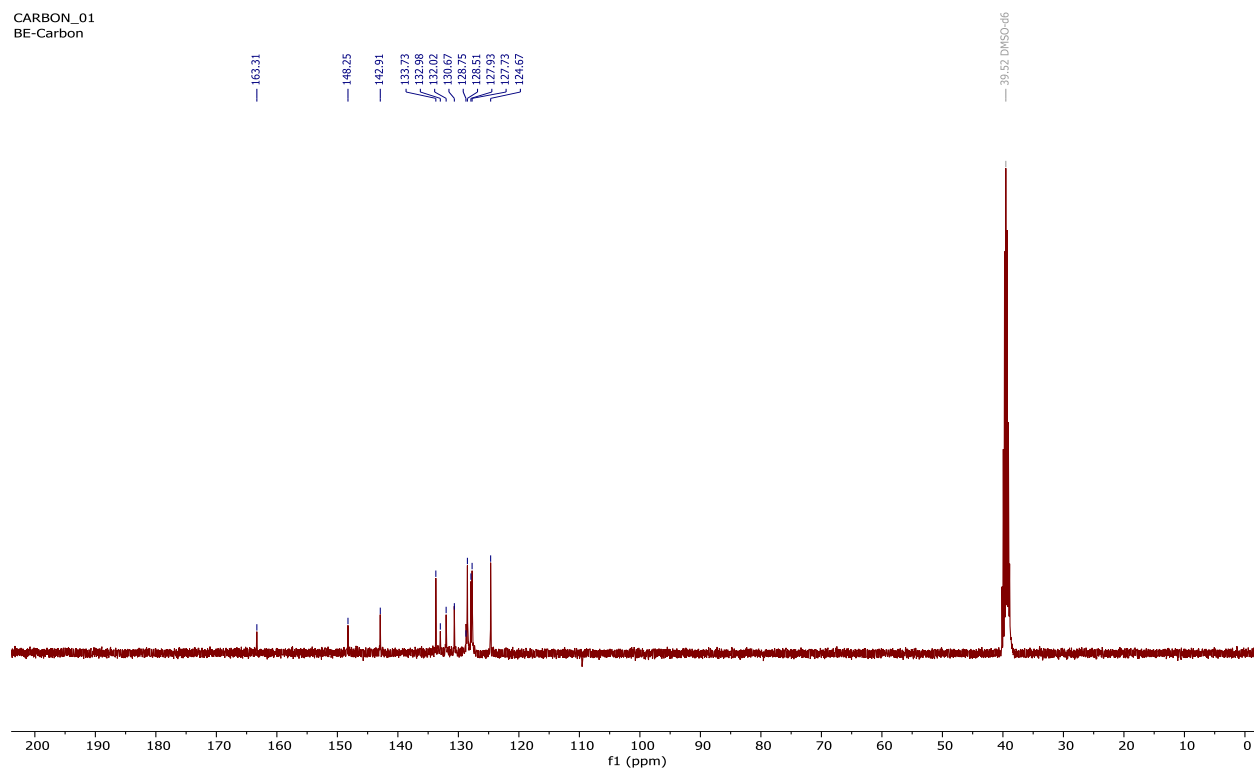


Figure S2. ^{13}C NMR of compound **16**.

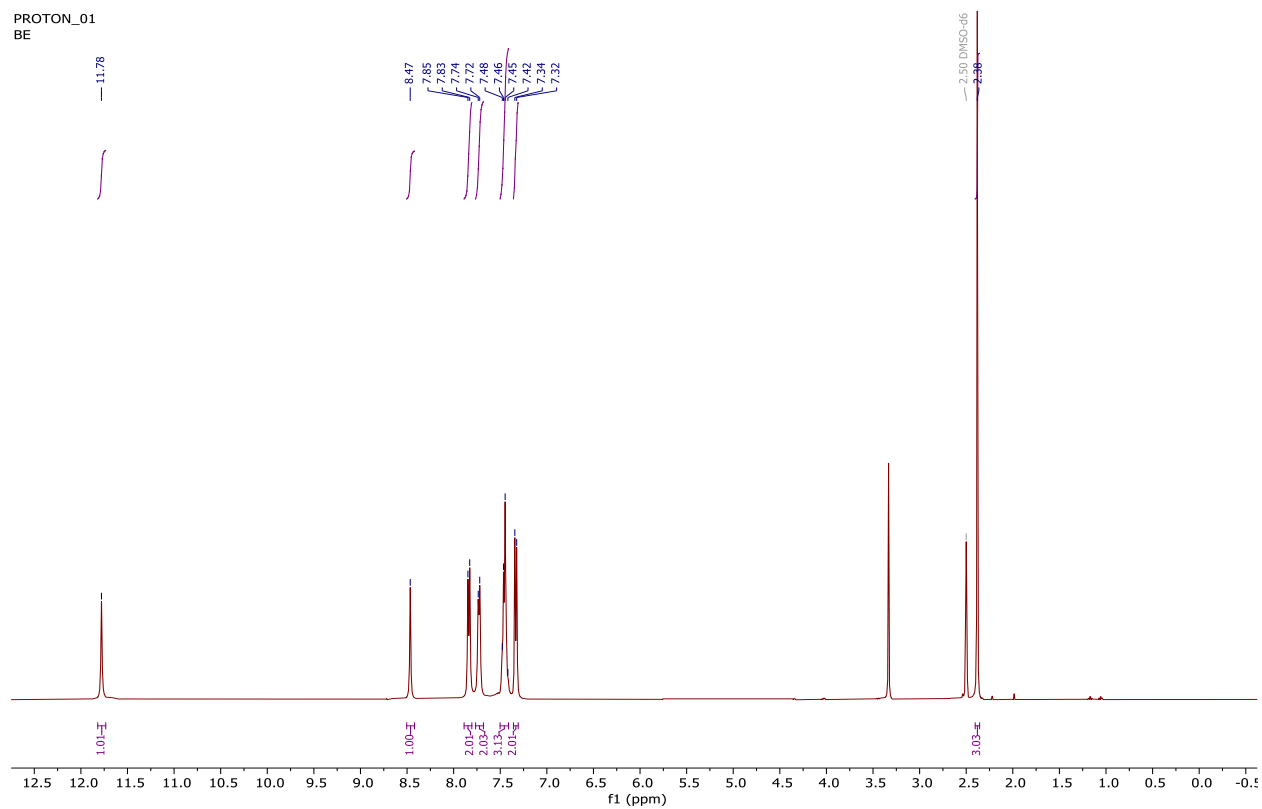


Figure S3. ^1H NMR of compound **24**.

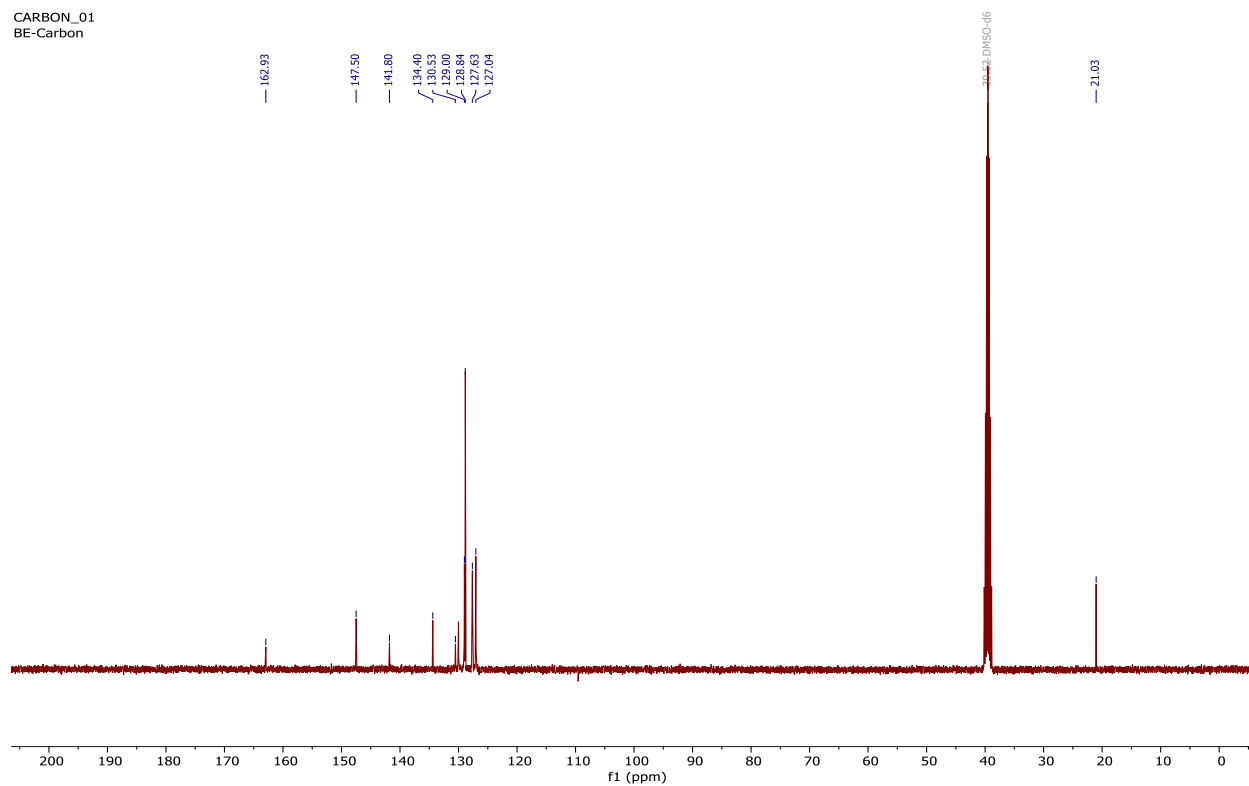


Figure S4. ^{13}C NMR of compound **24**.

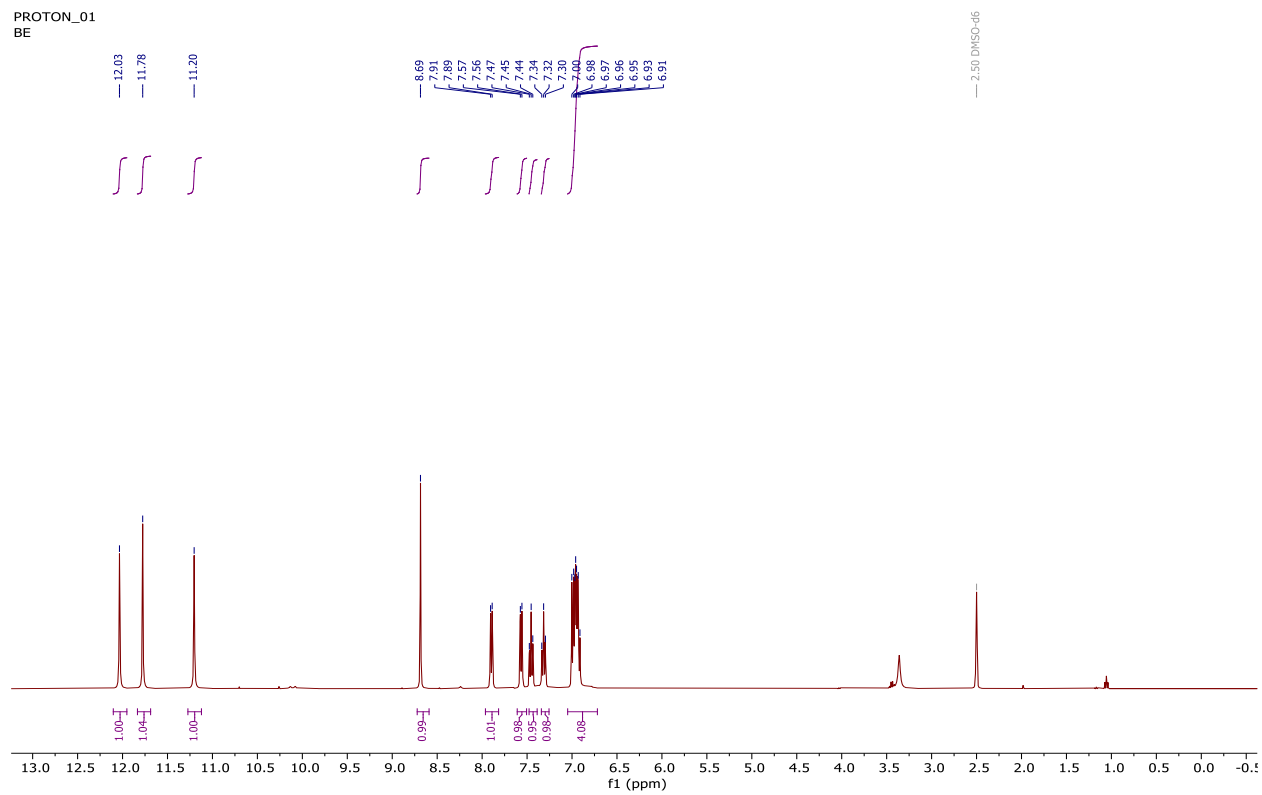


Figure S5. ^1H NMR of compound **27**.

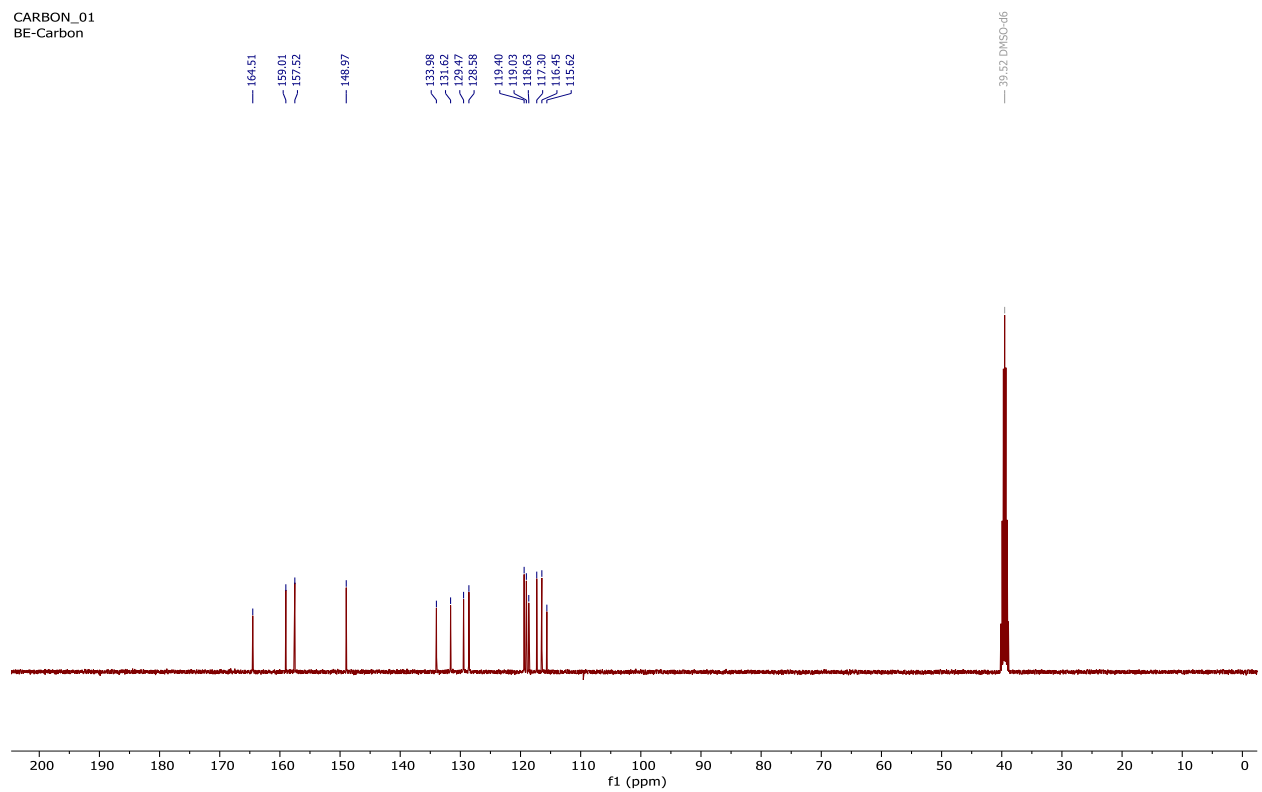


Figure S6. ^{13}C NMR of compound **27**.

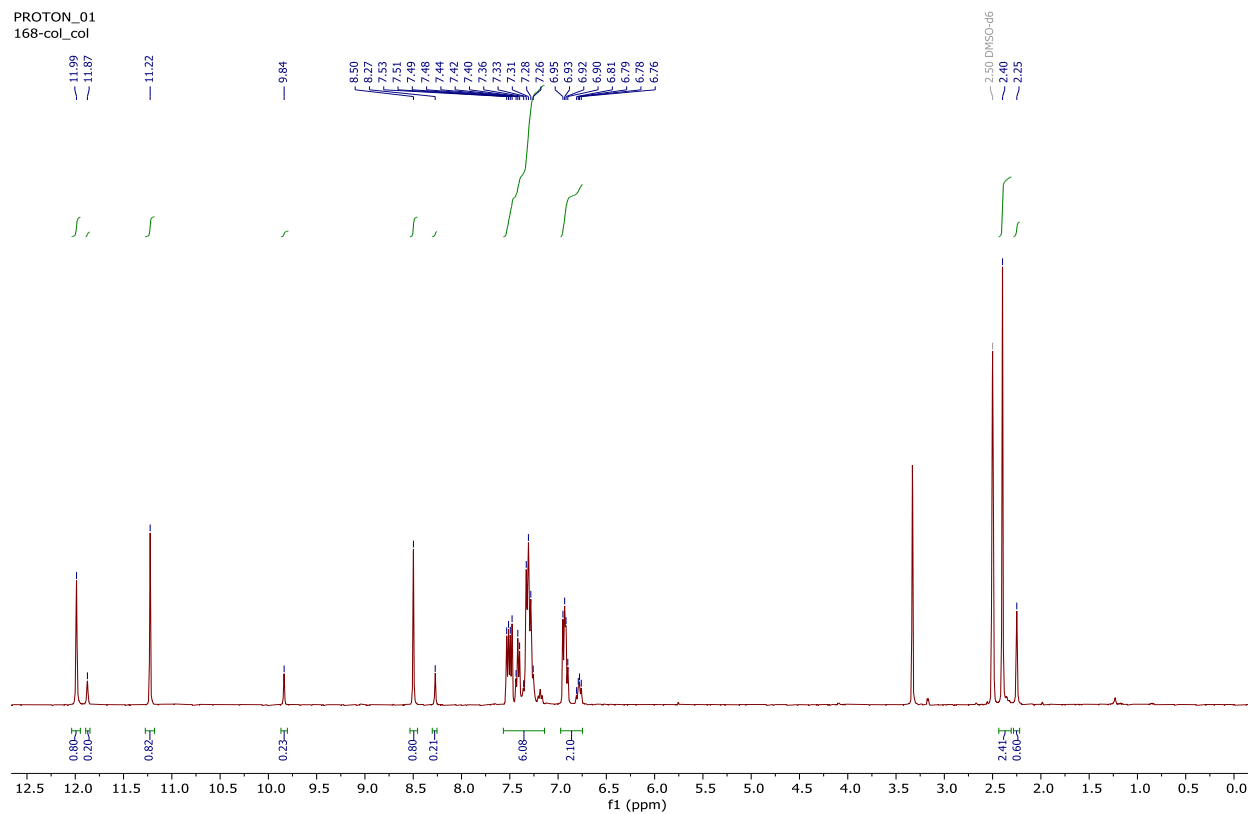


Figure S7. ^1H NMR of compound **29**.

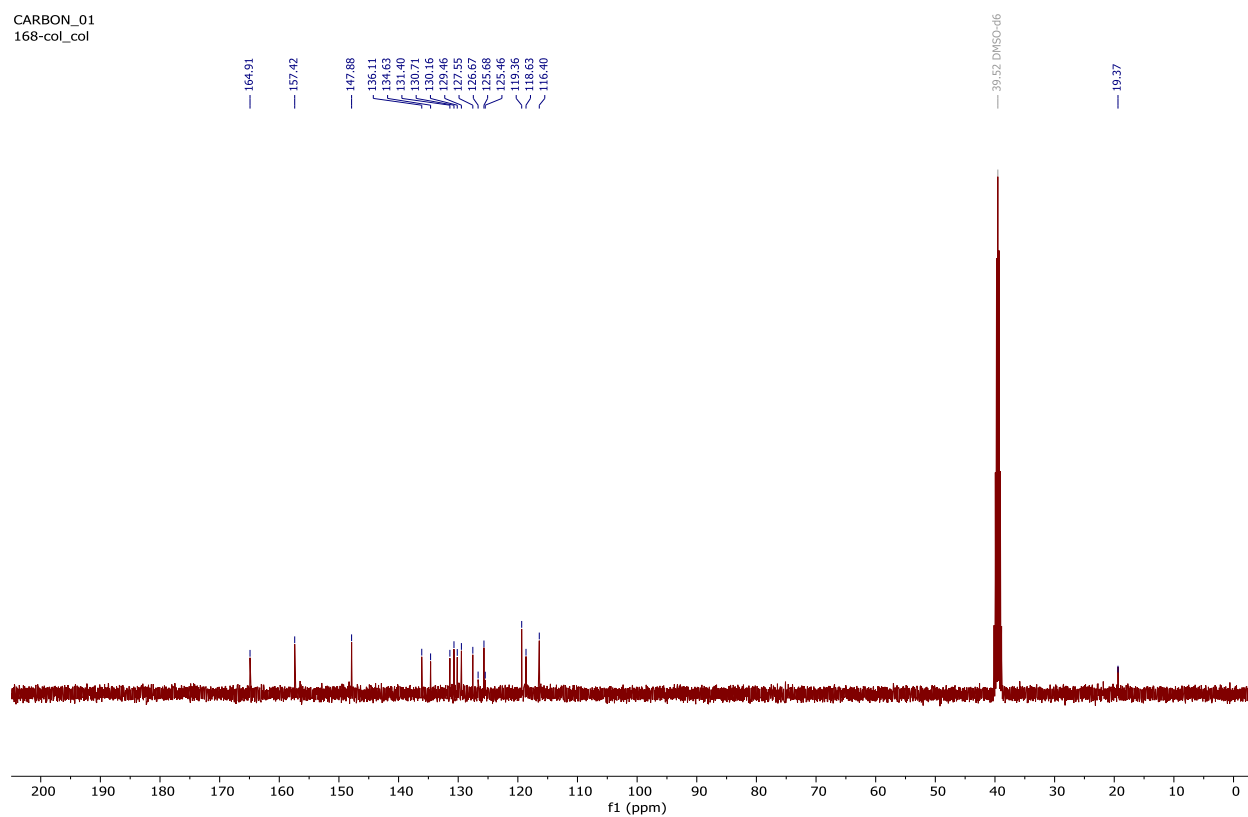


Figure S8. ^{13}C NMR of compound **29**.

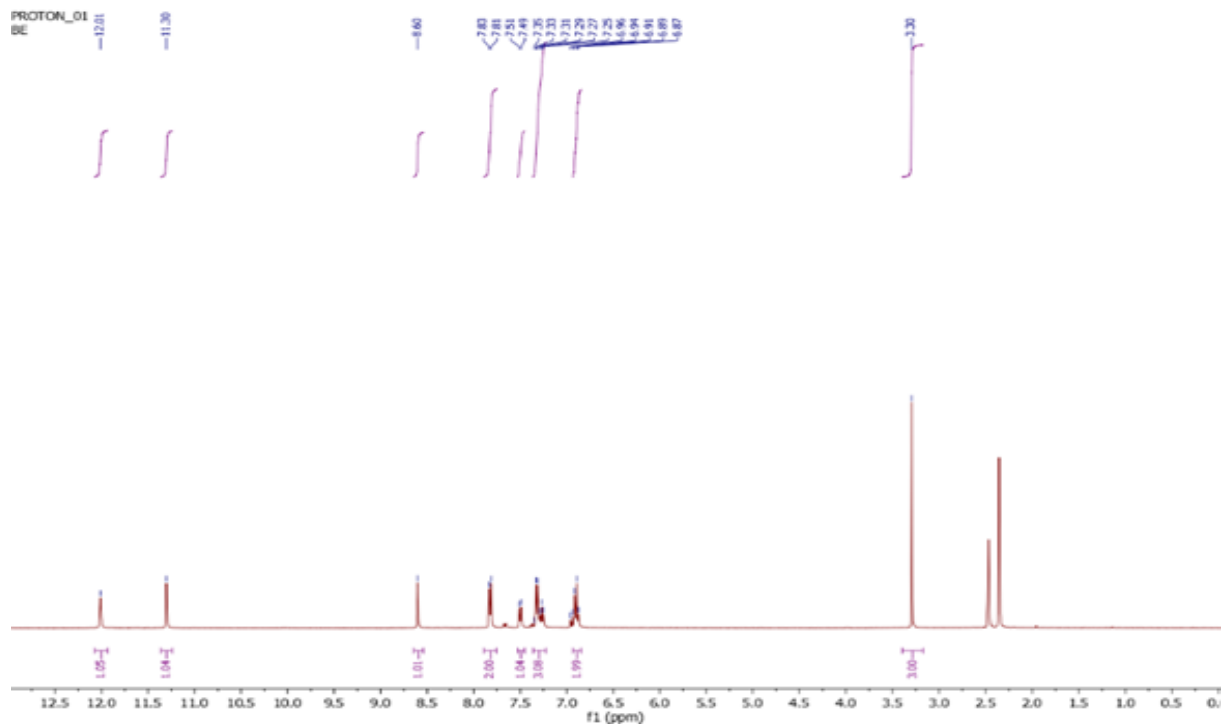


Figure S9. ^1H NMR of compound **33**.

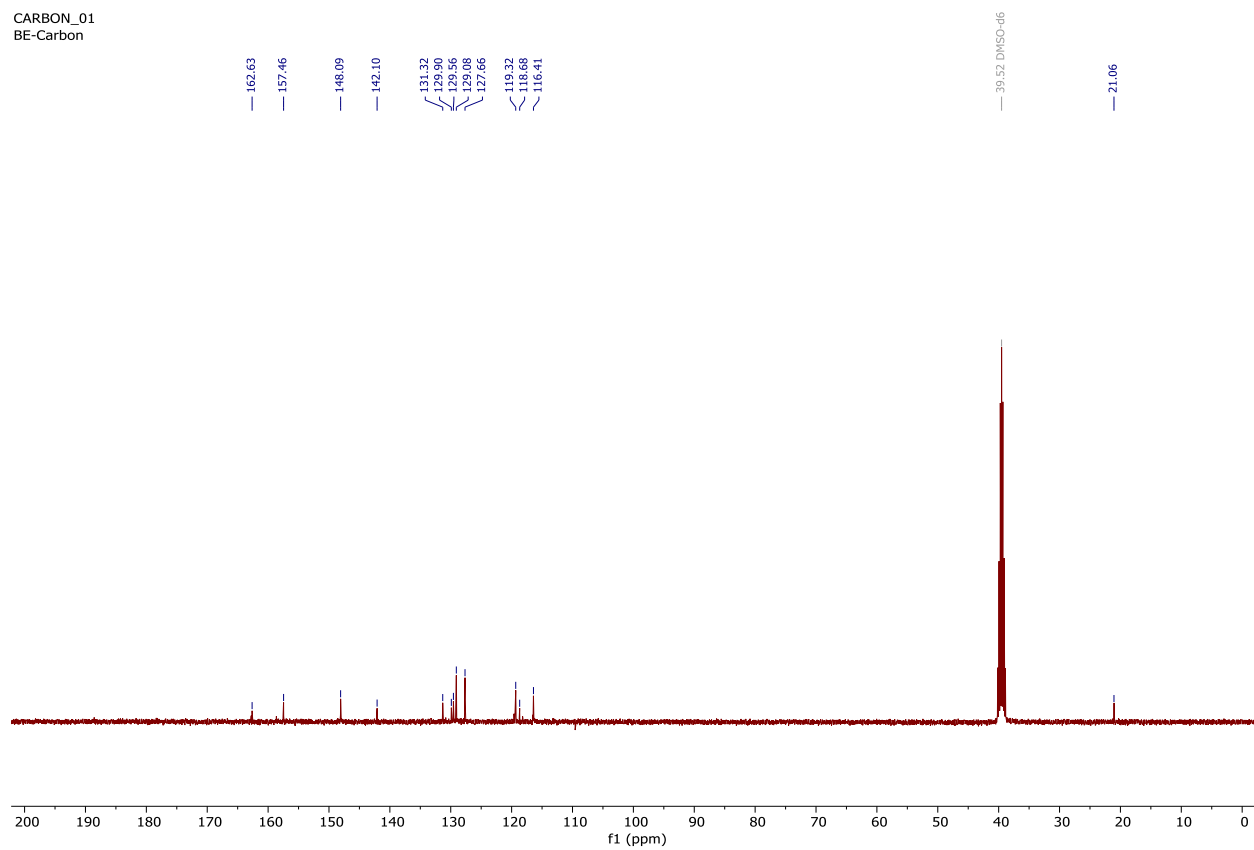


Figure S10. ^{13}C NMR of compound **33**.

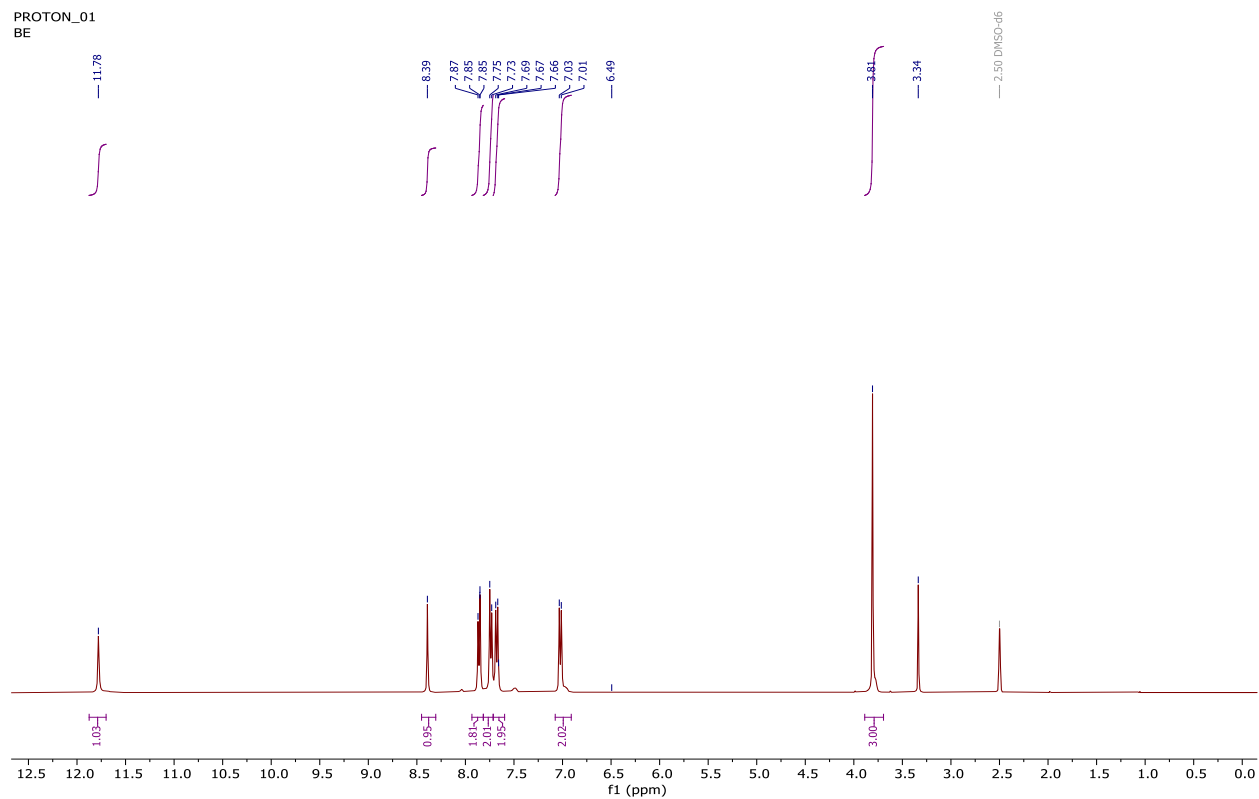


Figure S11. ^1H NMR of compound **35**.

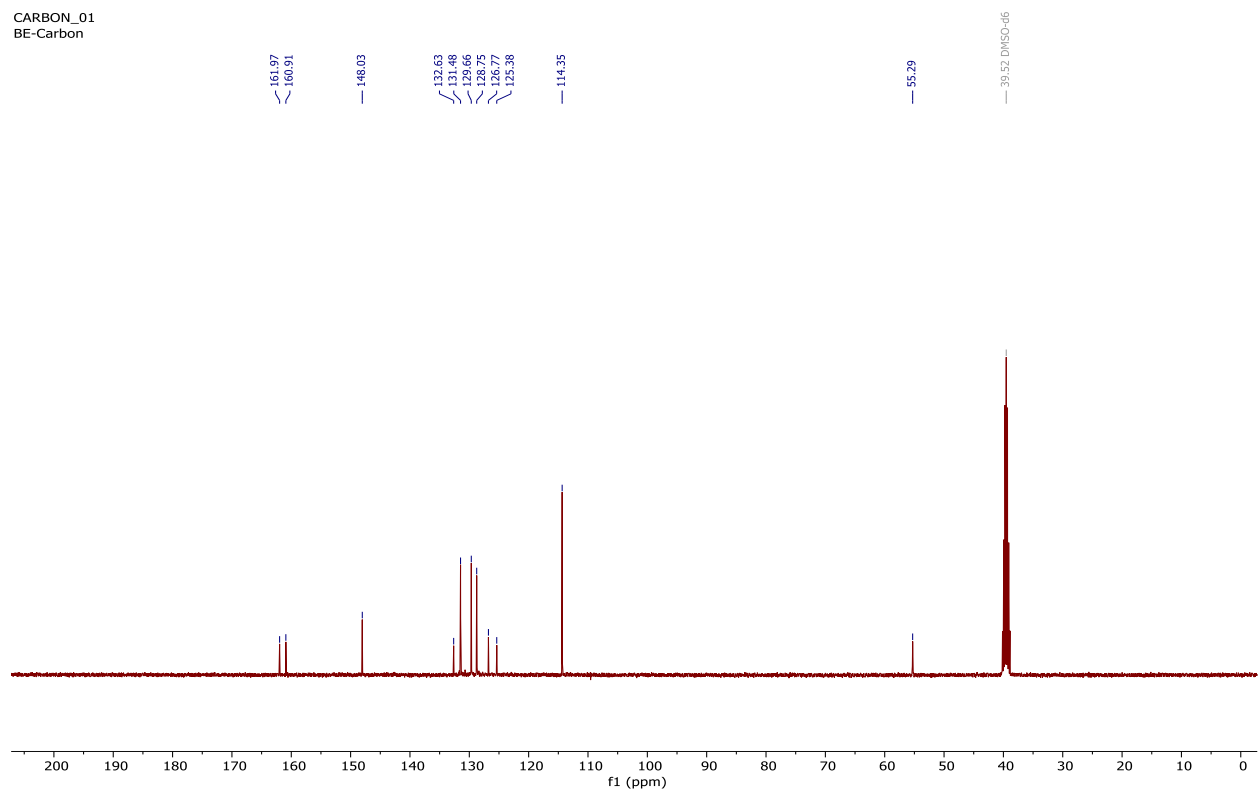


Figure S12. ^{13}C NMR of compound **35**.

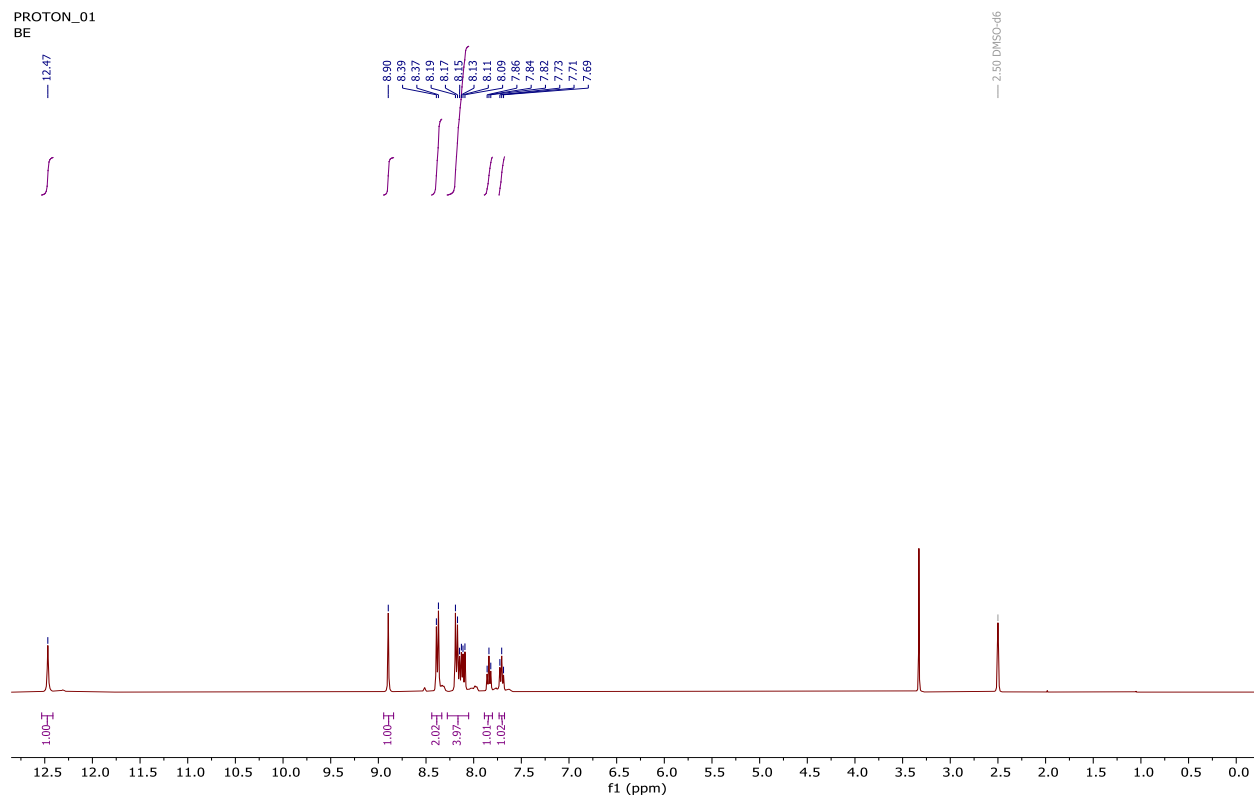


Figure S13. ^1H NMR of compound **38**.

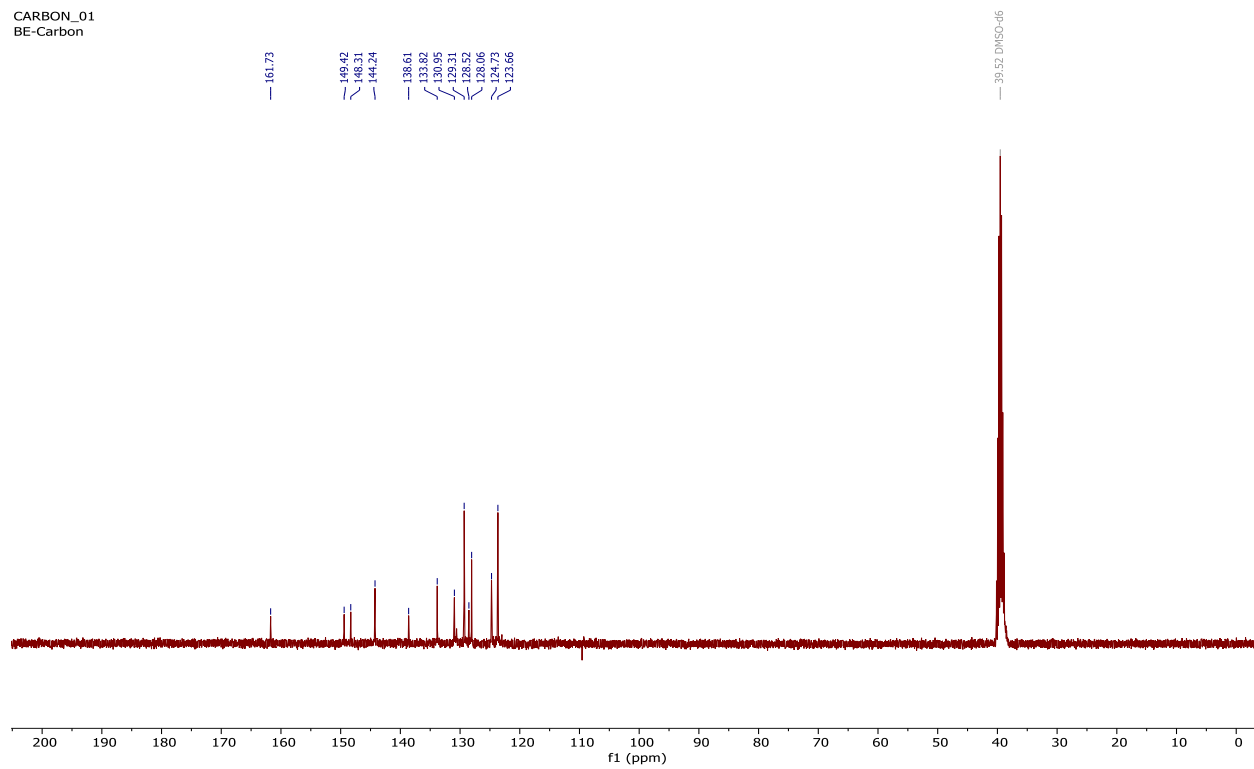


Figure S14. ^{13}C NMR of compound **38**.

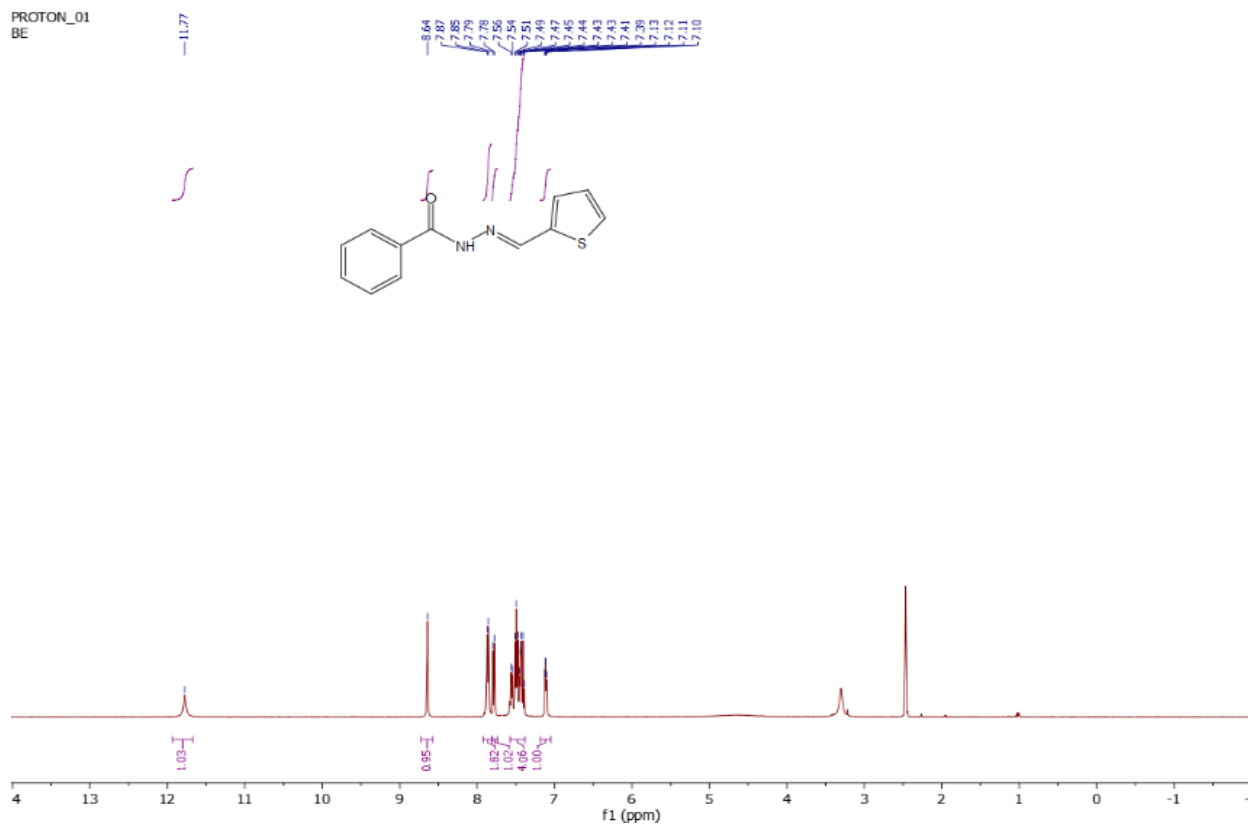


Figure S15. ^1H NMR of compound **42**.

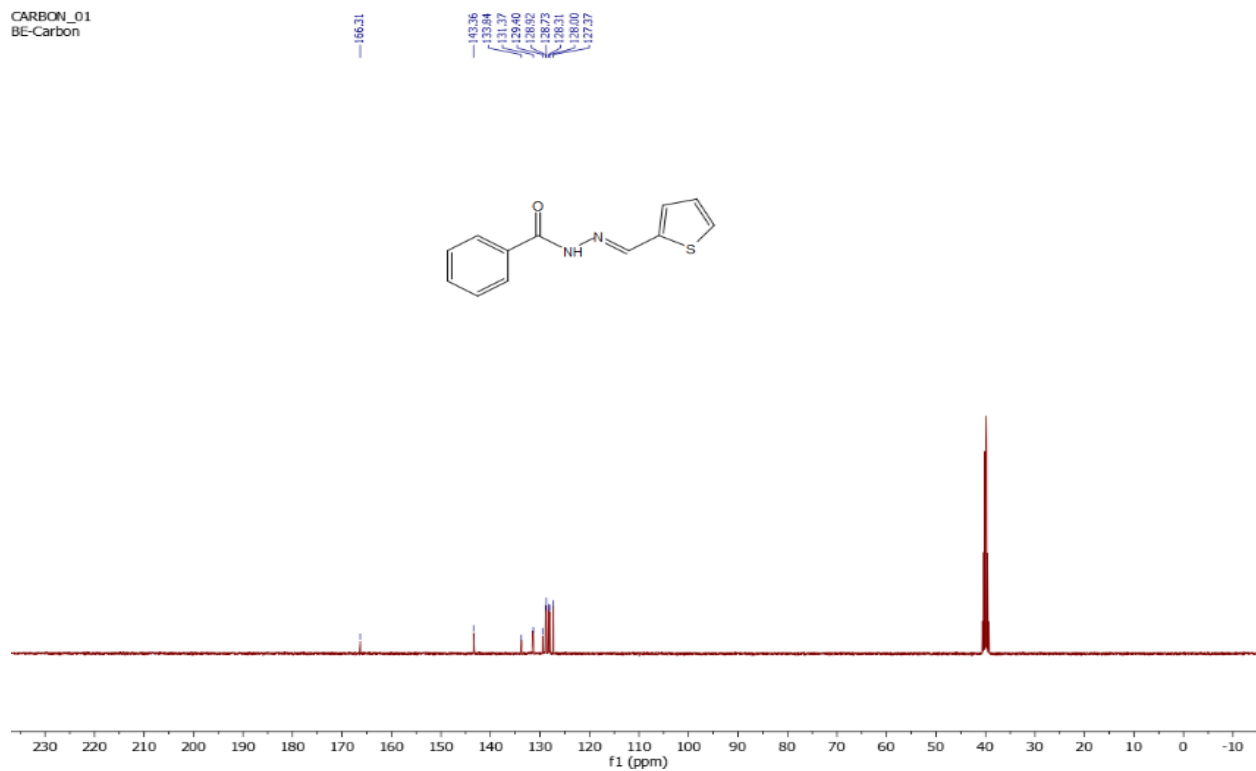


Figure S16. ^{13}C NMR of compound **42**.

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