

A Reaction of *N*-substituted Succinimides with Hydroxylamine as a Novel Approach to the Synthesis of Hydroxamic Acids

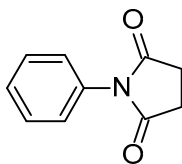
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1-phenylpyrrolidine-2,5-dione (1a)



Yield 0.26 g (15%) by one-pot approach and 1.19 g (68%) by two-step approach, colorless crystals (the amount of starting amine 0.93 g). Found, %: C 68.13; H 5.67; N 7.89; O 18.46. $C_{10}H_9NO_2$. Calculated, %: C 68.56; H 5.18; N 8.00; O 18.27. IR spectrum, ν , cm^{-1} : 2985, 2936, 1775, 1697, 1591, 1497, 1456, 1423, 1383, 1287, 1179, 1171, 1145, 1070, 1027, 977, 942, 924, 813, 762, 695, 666, 624, 583, 496, 459. 1H NMR spectrum ($CDCl_3$), ppm (J , Hz): 2.90 (4H, s, $-CH_2-$), 7.25-7.30 (2H, m, H Ar), 7.40 (1H, t, $J = 7.4$, H Ar), 7.48 (2H, t, $J = 7.7$, H Ar). The compound is also described in [18].

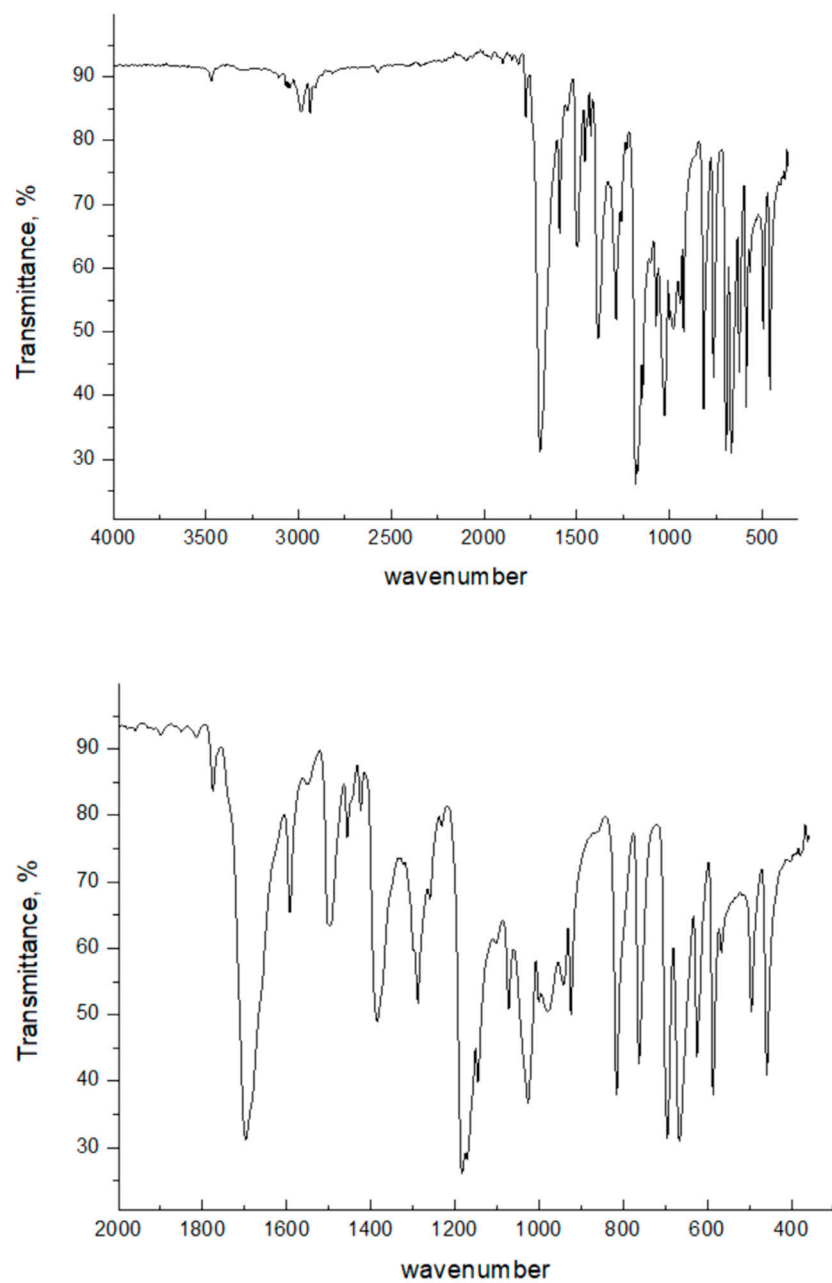


Figure S1: IR spectrum view of 1-phenylpyrrolidine-2,5-dione (**1a**)

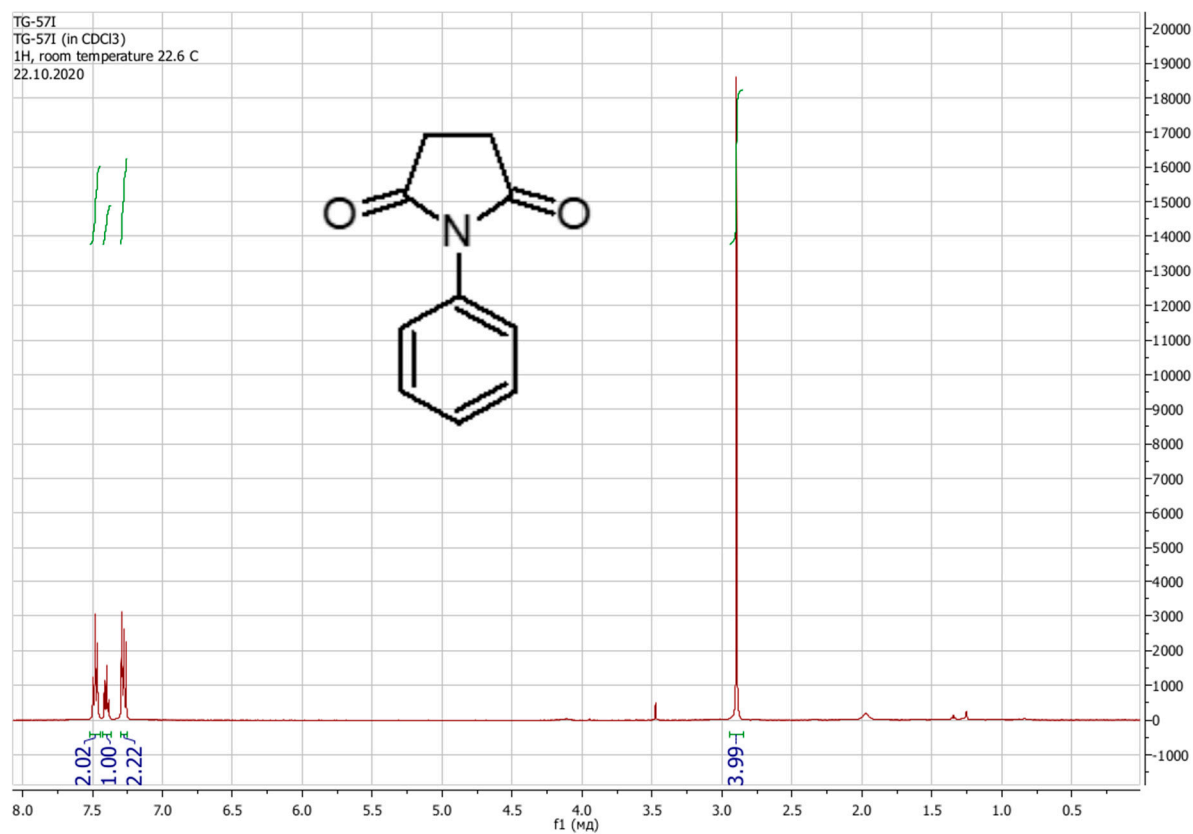
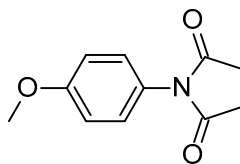


Figure S2: ¹H NMR spectrum view of 1-phenylpyrrolidine-2,5-dione (CDCl₃) (**1a**)

1-(4-methoxyphenyl)pyrrolidine-2,5-dione (1b)



Yield 0.72 g (35%) by one-pot approach and 1.11 g (54%) by two-step approach, colorless crystals (the amount of starting amine 1.23 g). Found, %: C 64.03; H 5.78; N 6.41; O 23.64. $C_{11}H_{11}NO_3$. Calculated, %: C 64.38; H 5.40; N 6.83; O 23.39. IR spectrum, ν , cm^{-1} : 3680, 2967, 1699, 1606, 1509, 1386, 1346, 1307, 1247, 1161, 1055, 1033, 1017, 925, 838, 808, 720, 668, 587, 532, 495, 430, 374. 1H NMR spectrum ($CDCl_3$), ppm (J , Hz): 2.87 (4H, s, $-CH_2-$), 3.82 (3H, s, $-CH_3$), 6.96 – 7.00 (2H, m, H Ar), 7.16 – 7.20 (2H, m, H Ar). The compound is also described in [19].

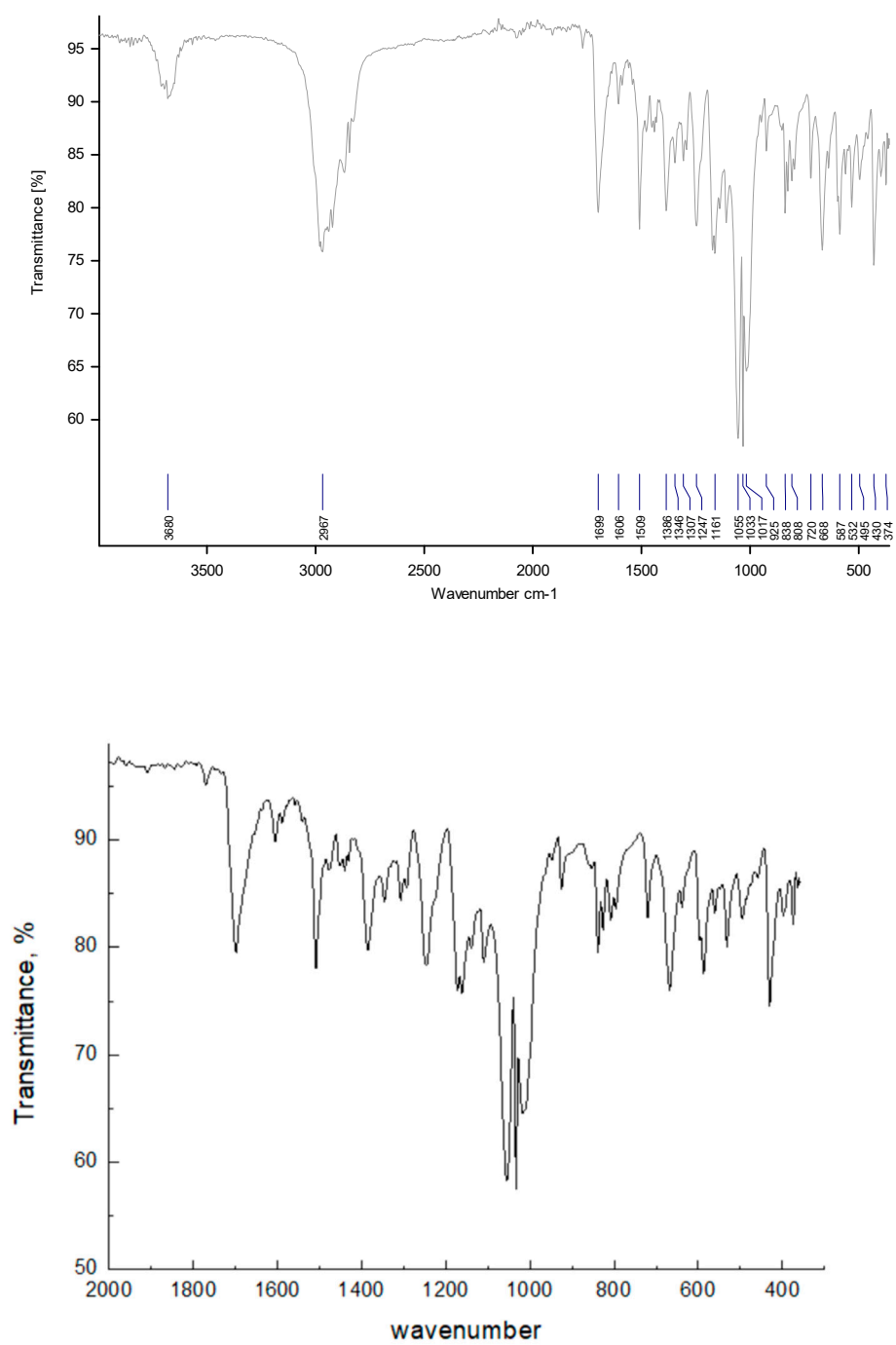


Figure S3: IR spectrum view of 1-(4-methoxyphenyl)pyrrolidine-2,5-dione (**1b**)

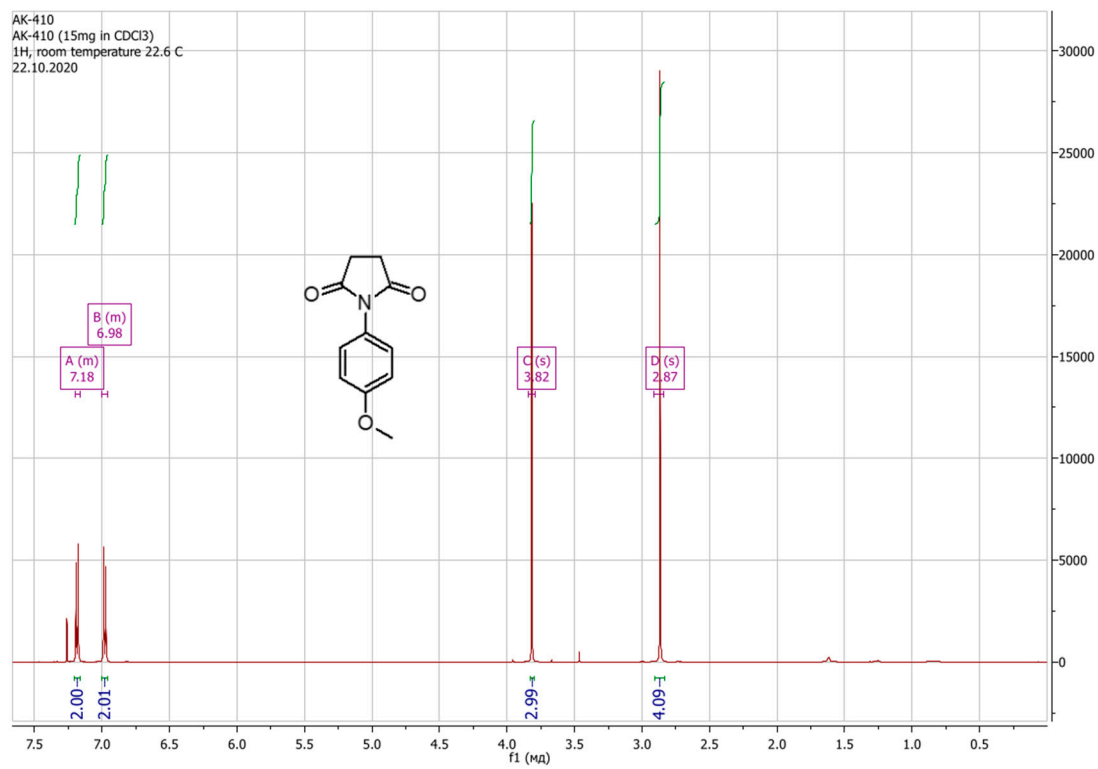
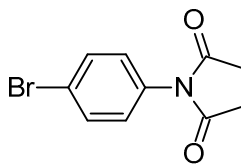


Figure S4: ¹H NMR spectrum view of 1-(4-methoxyphenyl)pyrrolidine-2,5-dione (CDCl₃) (1b)

1-(4-bromophenyl)pyrrolidine-2,5-dione (1c)



Yield 1.32 g (52%) by one-pot approach and 1.65 g (65%) by two-step approach, colorless crystals (the amount of starting amine 1.72 g). Found, %: C 47.02; H 3.25; N 5.30; O 12.81. $C_{10}H_8BrNO_2$. Calculated, %: C 47.27; H 3.17; Br 31.45; N 5.51; O 12.59. IR spectrum, ν , cm^{-1} : 2979, 2928, 1765, 1698, 1587, 1487, 1393, 1294, 1184, 1162, 1146, 1067, 1012, 968, 922, 846, 824, 727, 712, 669, 633, 586, 563, 502, 371. 1H NMR spectrum ($CDCl_3$), ppm (J , Hz): 2.89 (4H, s, $-CH_2-$), 7.18 – 7.21 (2H, m, H Ar), 7.58 – 7.61 (2H, m, H Ar). The compound is also described in [20].

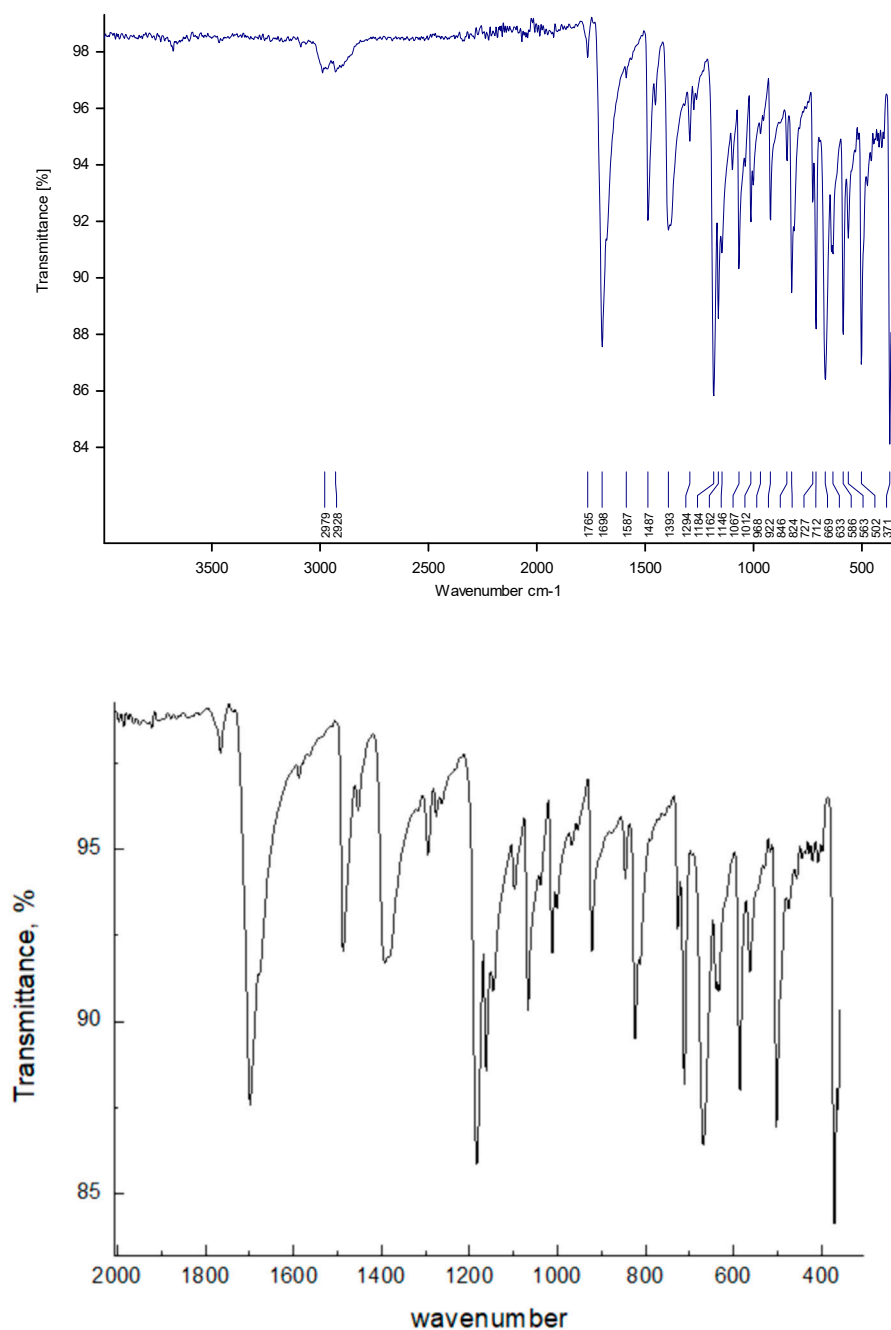


Figure S5: IR spectrum view of 1-(4-bromophenyl)pyrrolidine-2,5-dione (**1c**)

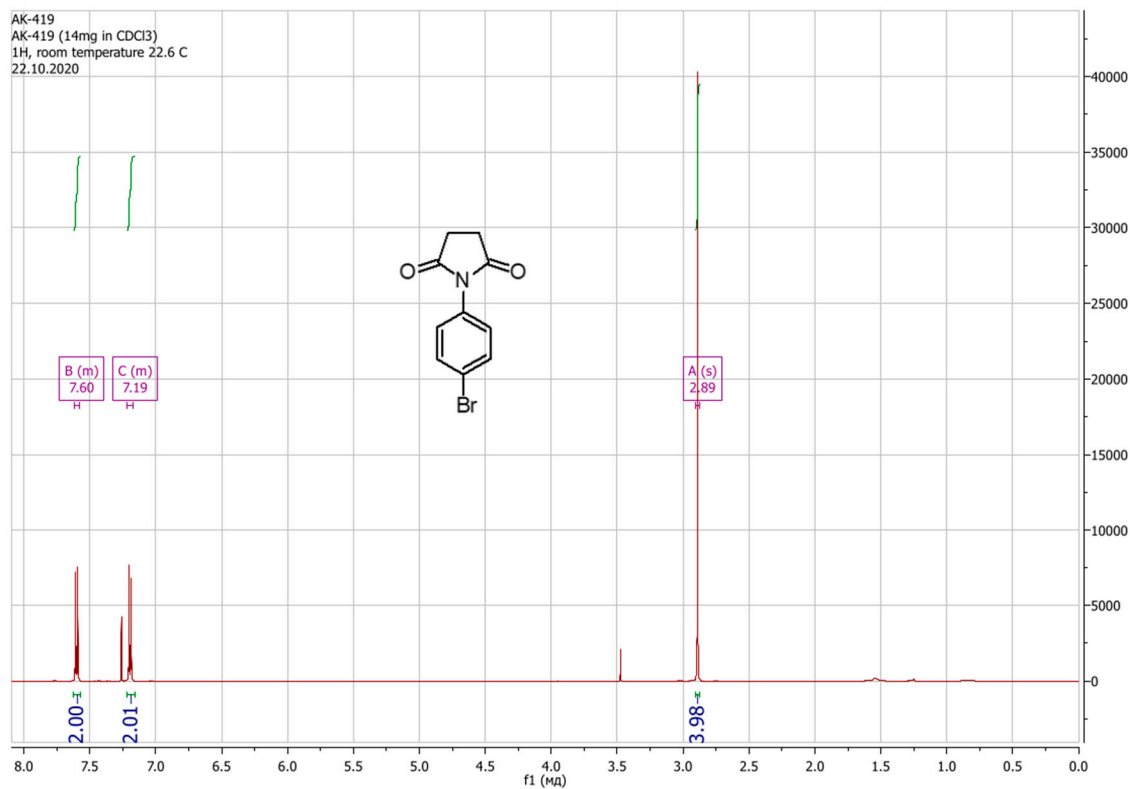
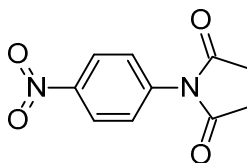


Figure S6: ¹H NMR spectrum view of 1-(4-bromophenyl)pyrrolidine-2,5-dione (CDCl₃) (1c)

1-(4-nitrophenyl)pyrrolidine-2,5-dione (1d)



Yield 0.69 g (31%) by one-pot approach and 0.98 g (44%) by two-step approach, colorless crystals (the amount of starting amine 1.38 g). Found, %: C 54.42; H 3.72; N 12.53; O 29.32. $C_{10}H_8N_2O_4$. Calculated, %: C 54.55; H 3.66; N 12.72; O 29.07. IR spectrum, ν , cm^{-1} : 3680, 2973, 2922, 2867, 1699, 1598, 1519, 1492, 1345, 1322, 1288, 1266, 1055, 1033, 1008, 954, 925, 850, 823, 753, 723, 674, 628, 586, 484, 405. 1H NMR spectrum ($CDCl_3$), ppm (J , Hz): 2.96 (4H, s, $-CH_2-$), 7.58 – 7.62 (2H, m, H Ar), 8.32 – 8.36 (2H, m, H Ar). The compound is also described in [20].

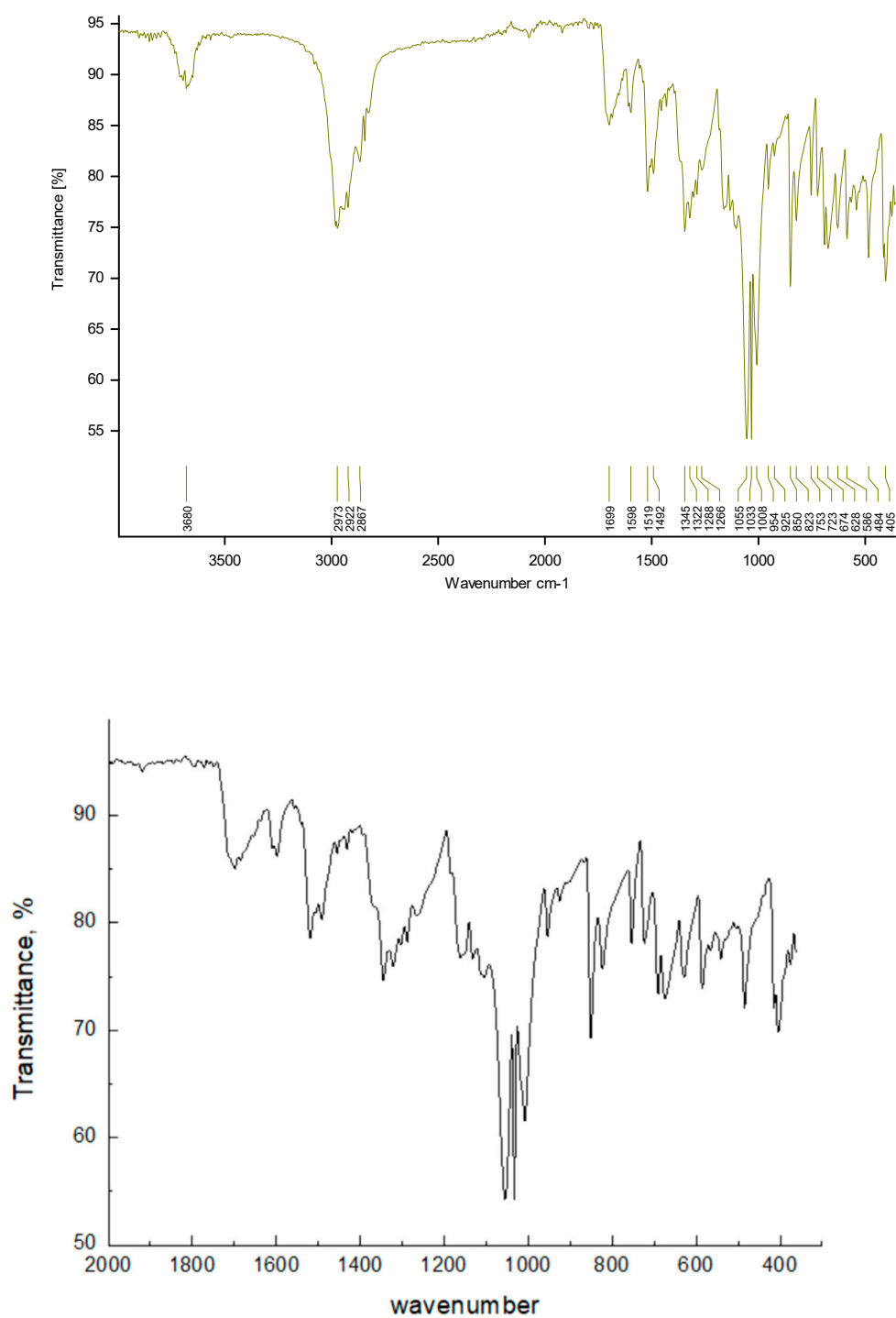


Figure S7: IR spectrum view of 1-(4-nitrophenyl)pyrrolidine-2,5-dione (**1d**)

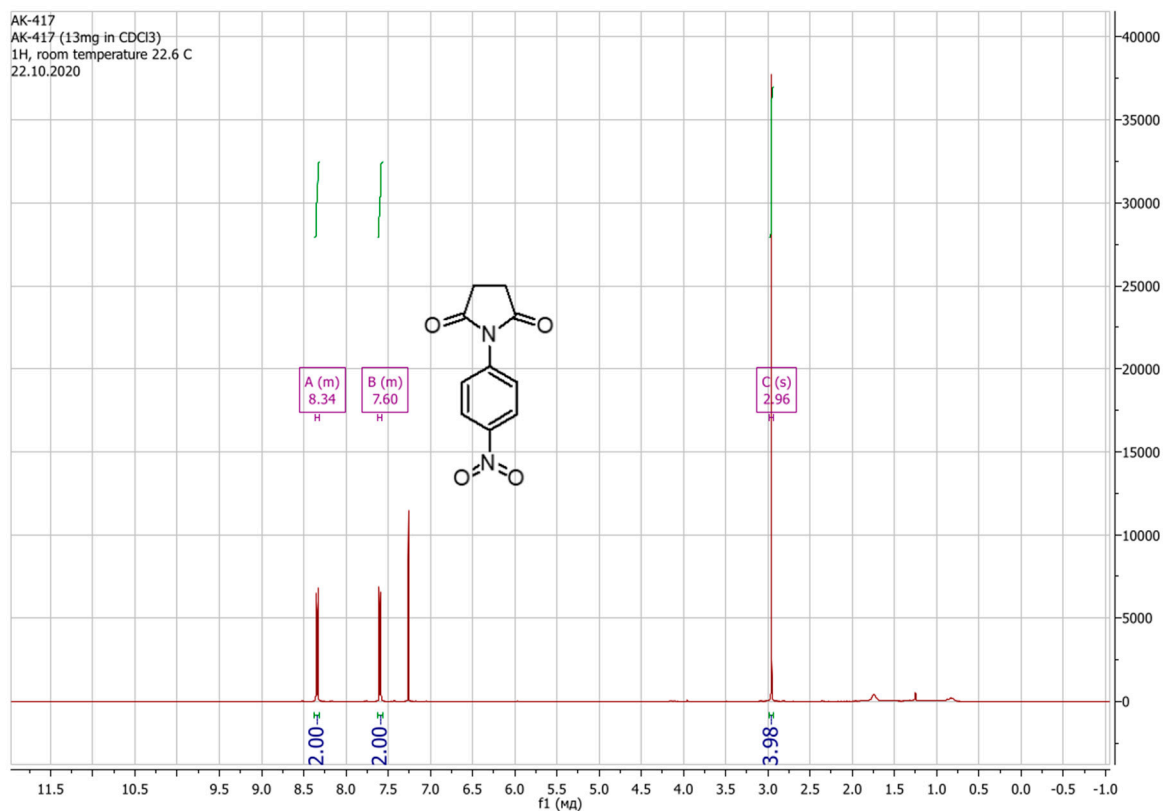
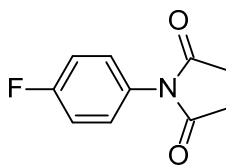


Figure S8: NMR ¹H spectrum view of 1-(4-nitrophenyl)pyrrolidine-2,5-dione (CDCl₃)

(1d)

1-(4-fluorophenyl)pyrrolidine-2,5-dione (1e)



Yield 0.81 g (42%) by one-pot approach and 1.23 g (64%) by two-step approach, colorless crystals (the amount of starting amine 1.11 g). Found, %: C 62.31; H 4.22; N 7.18; O 16.68. $C_{10}H_8FNO_2$. Calculated, %: C 62.18; H 4.17; F 9.83; N 7.25; O 16.56. IR spectrum, ν , cm^{-1} : 1701, 1509, 1425, 1387, 1290, 1216, 1180, 1158, 1009, 941, 924, 839, 812, 714, 655, 581, 517, 447, 389, 377. 1H NMR spectrum ($CDCl_3$), ppm (J , Hz): 2.90 (4H, s, $-CH_2-$), 7.17 (2H, t, $J = 8.6$, H-Ar); 7.26-7.30 (2H, m, H-Ar). The compound is also described in [20].

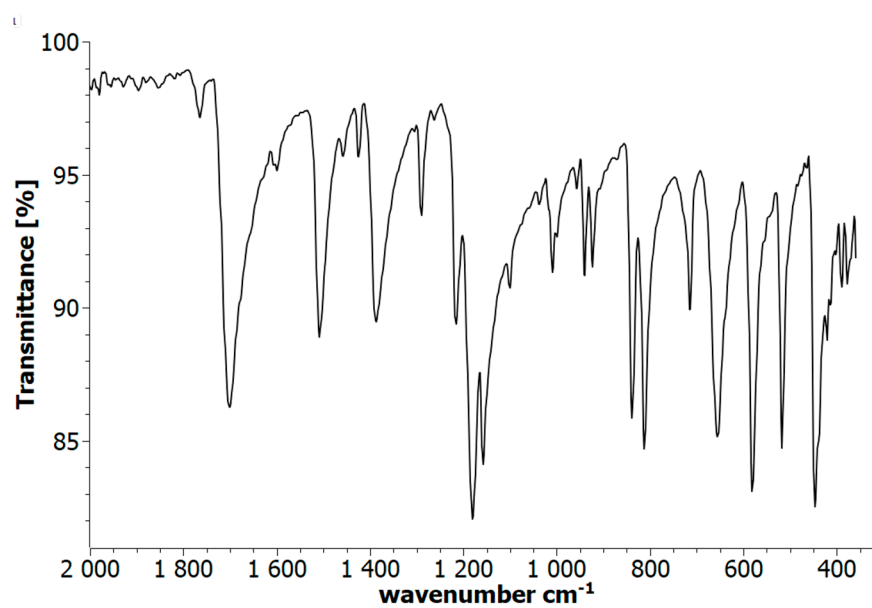
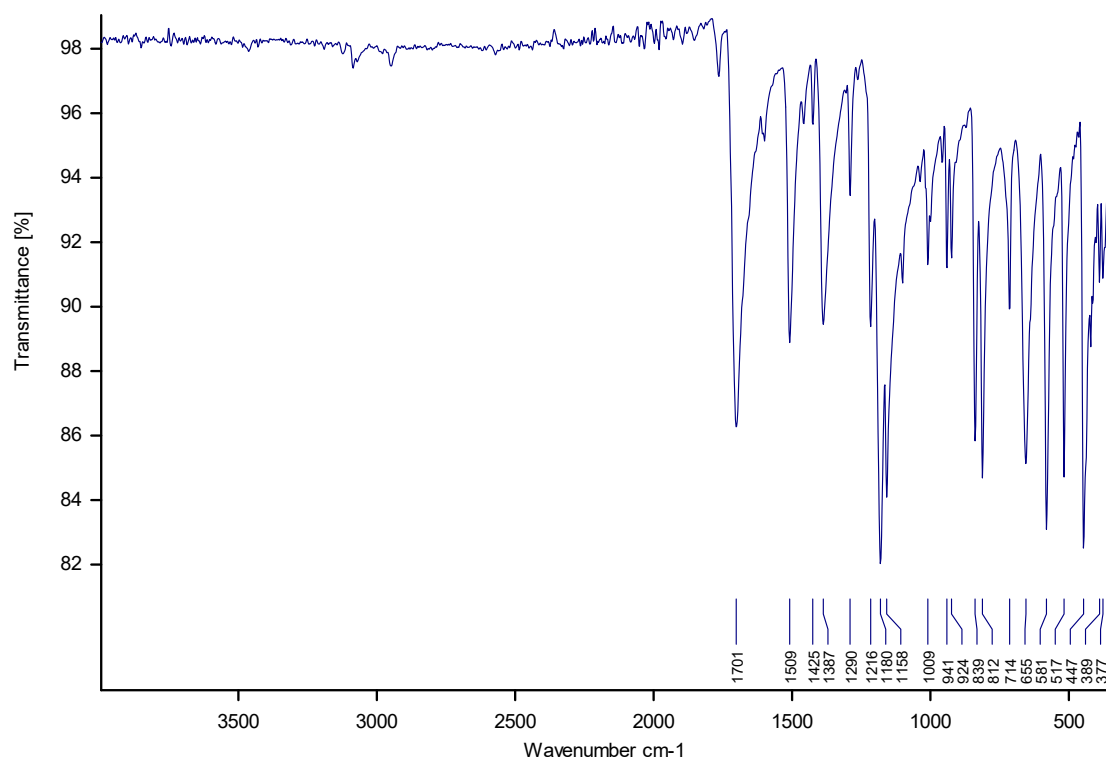


Figure S9: IR spectrum view of 1-(4-fluorophenyl)pyrrolidine-2,5-dione (**1e**)

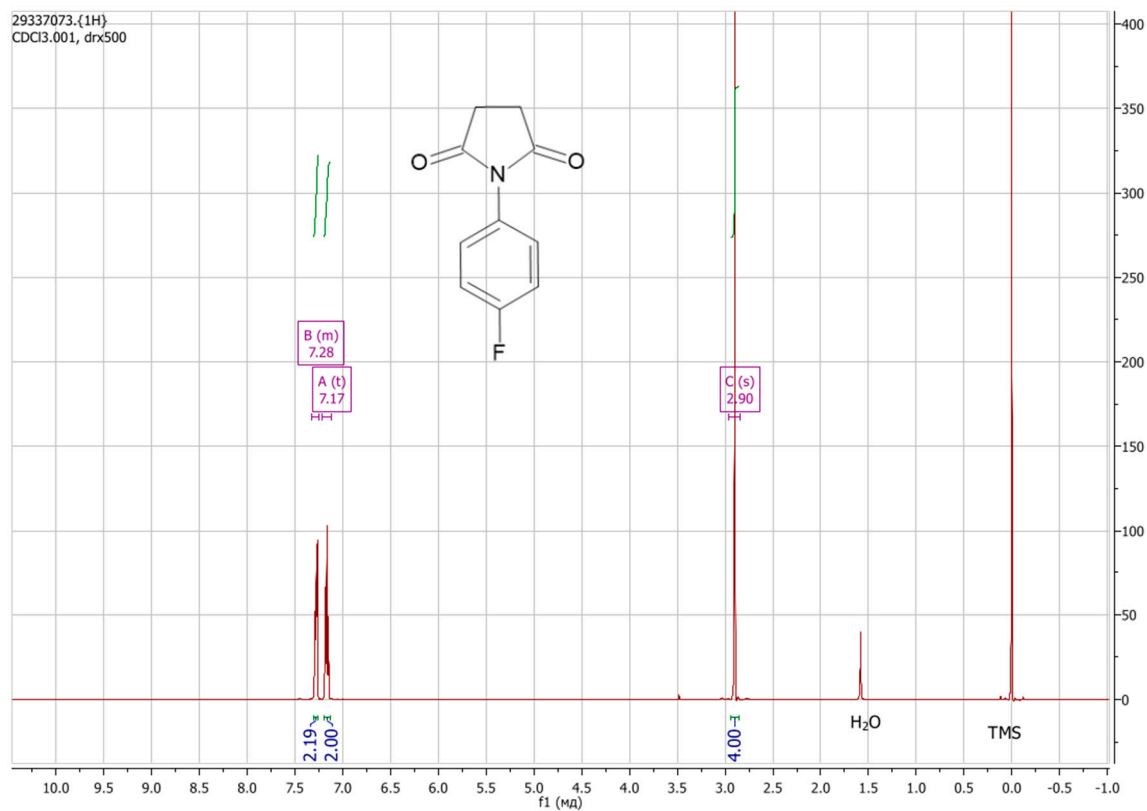
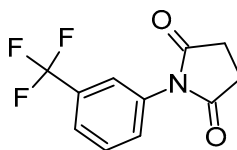


Figure S10: ^1H NMR spectrum view of 1-(4-fluorophenyl)pyrrolidine-2,5-dione (CDCl_3) (1e)

1-[3-(trifluoromethyl)phenyl]pyrrolidine-2,5-dione (1f)



Yield 0.8 g (33%) by one-pot approach and 1.17 g (48%) by two-step approach, colorless crystals (the amount of starting amine 1.61 g). Found, %: C 54.22; H 3.41; N 5.91; O 13.35. $C_{11}H_8F_3NO_2$. Calculated, %: C 54.33; H 3.32; F 23.44; N 5.76; O 13.16. IR spectrum, ν , cm^{-1} : 1707, 1492, 1455, 1391, 1324, 1183, 1164, 1109, 1064, 1004, 954, 894, 815, 697, 670, 654, 624, 575, 464, 442, 375. 1H NMR spectrum (DMSO, d_6), ppm (J , Hz): 2.80 (4H, s, $-CH_2-$), 7.61 (1H, d, $J = 7.8$, H-Ar), 7.69 (1H, s, H-Ar), 7.75 (1H, t, $J = 7.8$, H-Ar), 7.80 (1H, d, $J = 7.9$, H-Ar). ^{13}C NMR spectrum ($CDCl_3$), δ , ppm: 28.4; 123.52 (q, $J = 3.9$); 123.53 (q, $J = 272.5$); 125.34 (q, $J = 3.6$); 129.8; 131.7 (q, $J = 33.0$); 132.5; 175.6.

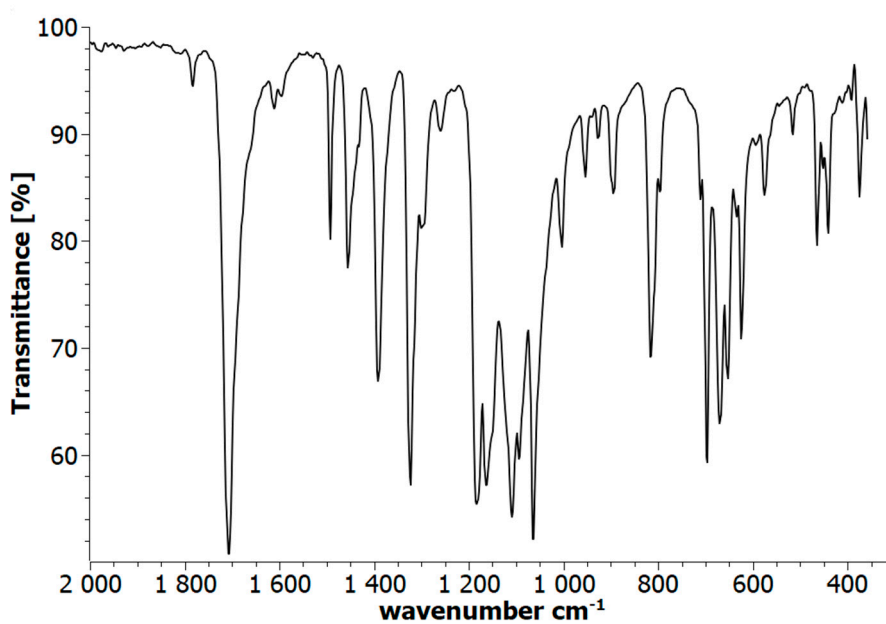
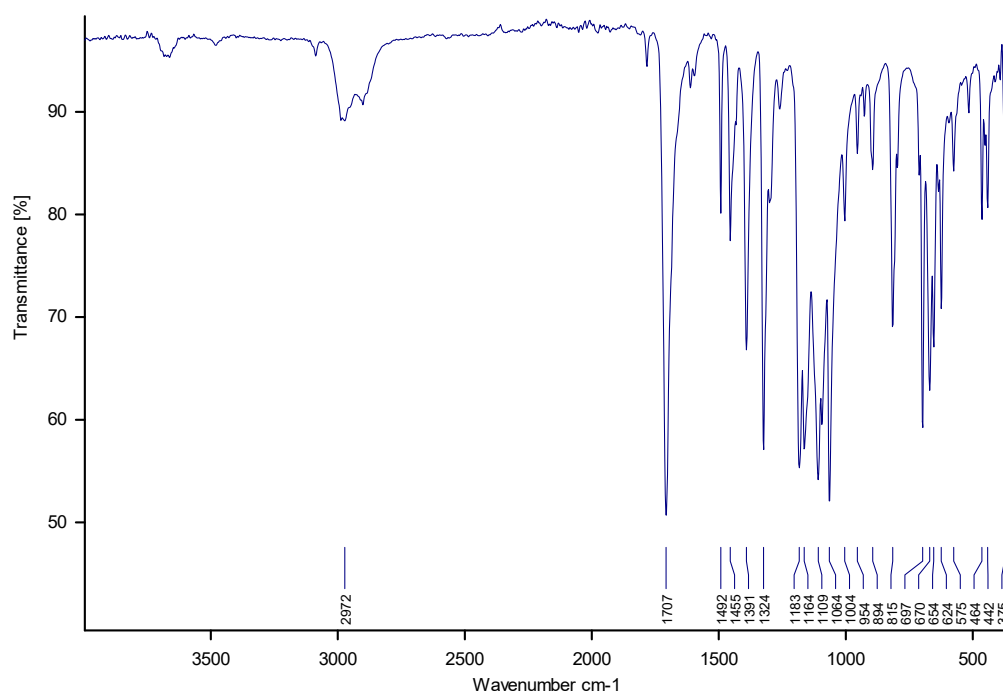


Figure S11: IR spectrum view of 1-[3-(trifluoromethyl)phenyl]pyrrolidine-2,5-dione (**1f**)

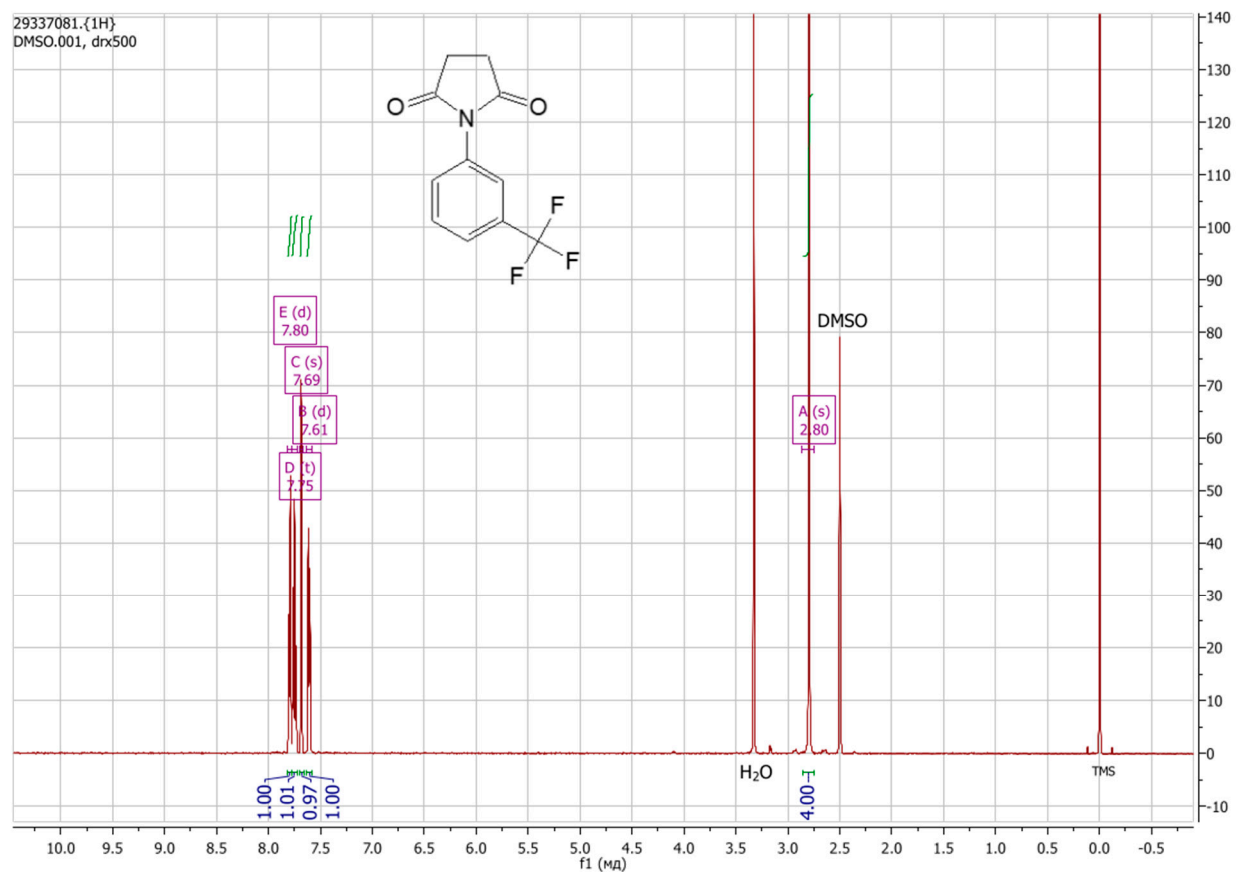


Figure S12: ^1H NMR spectrum view of 1-[3-(trifluoromethyl)phenyl]pyrrolidine-2,5-dione ($\text{DMSO-}d_6$) (**1f**)

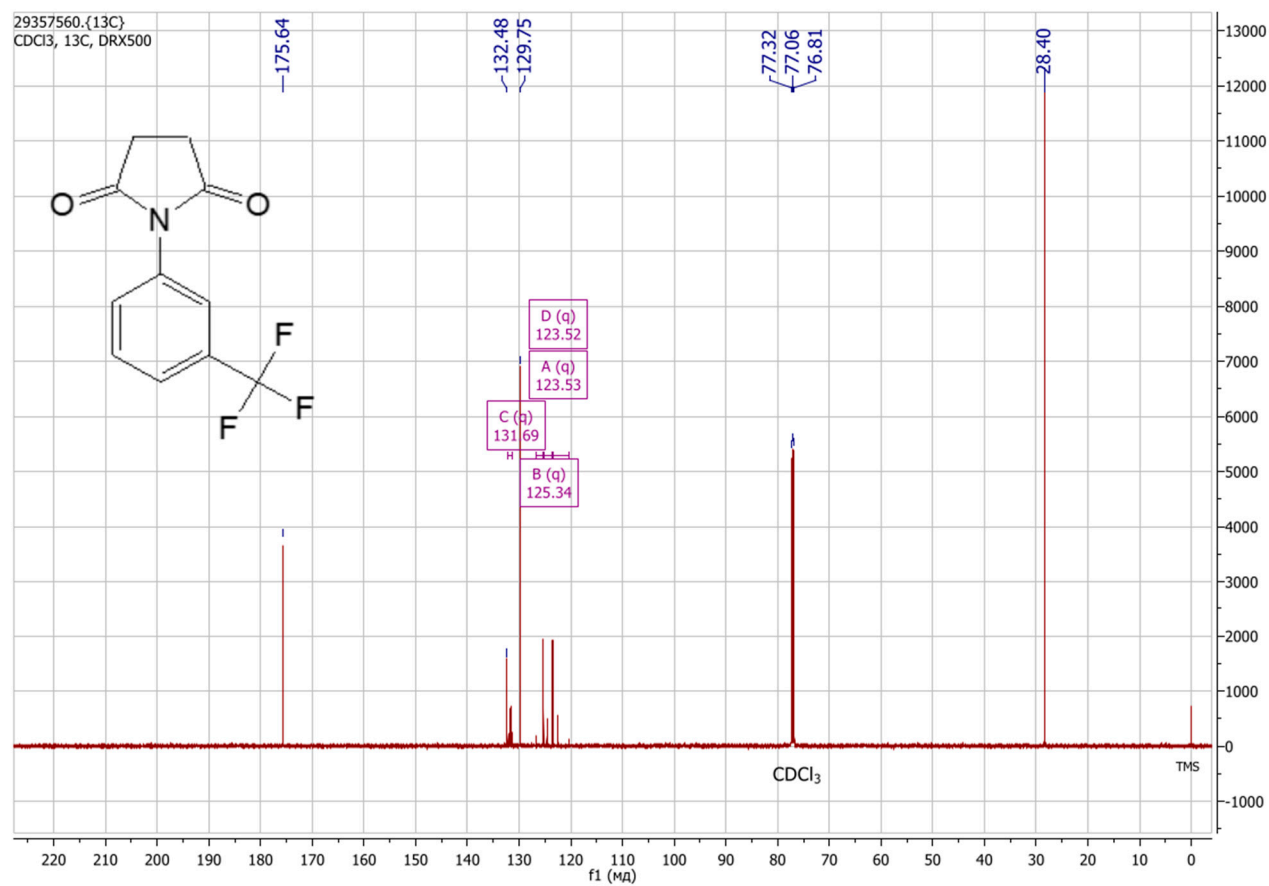
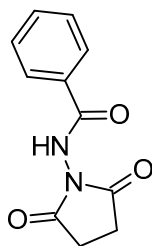


Figure S13: ¹³C NMR spectrum view of 1-[3-(trifluoromethyl)phenyl]pyrrolidine-2,5-dione (CDCl₃) (**1f**)

***N*-(2,5-dioxopyrrolidin-1-yl)benzamide (1g)**



Yield 0.93 g (42%) by one-pot approach and 1.0 g (45%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.36 g). Found, %: C 60.32; H 4.78; N 12.67; O 22.12. $C_{11}H_{10}N_2O_3$. Calculated, %: C 60.55; H 4.62; N 12.84; O 22.00. IR spectrum, ν , cm^{-1} : 3128, 2988, 1791, 1723, 1655, 1601, 1578, 1521, 1484, 1416, 1307, 1291, 1189, 1158, 1086, 1046, 1001, 920, 820, 718, 688, 654, 607, 492, 421, 404. 1H NMR spectrum (DMSO- d_6), ppm (*J*, Hz): 2.86 (4H, s, -CH₂-), 7.52 – 7.58 (2H, m, H Ar), 7.62 – 7.67 (1H, m, H Ar), 7.90 – 7.94 (2H, m, H Ar), 11.06 (1H, s, N-H). The compound is also described in [21, 22].

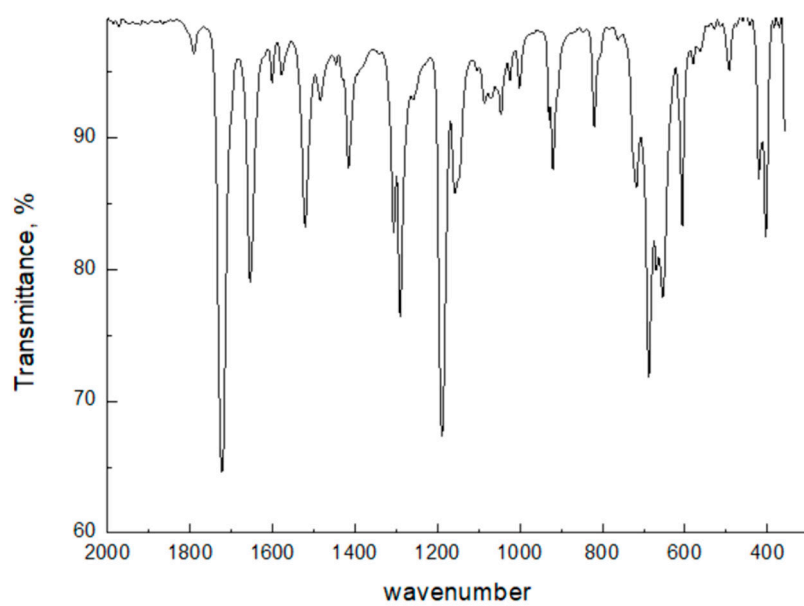
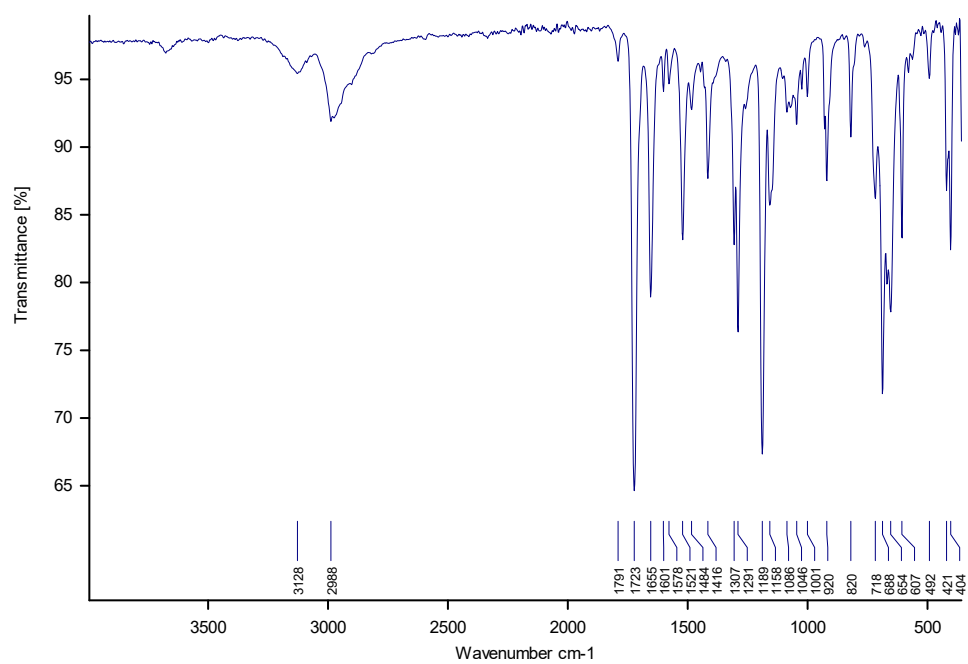


Figure S14: IR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)benzamide (**1g**)

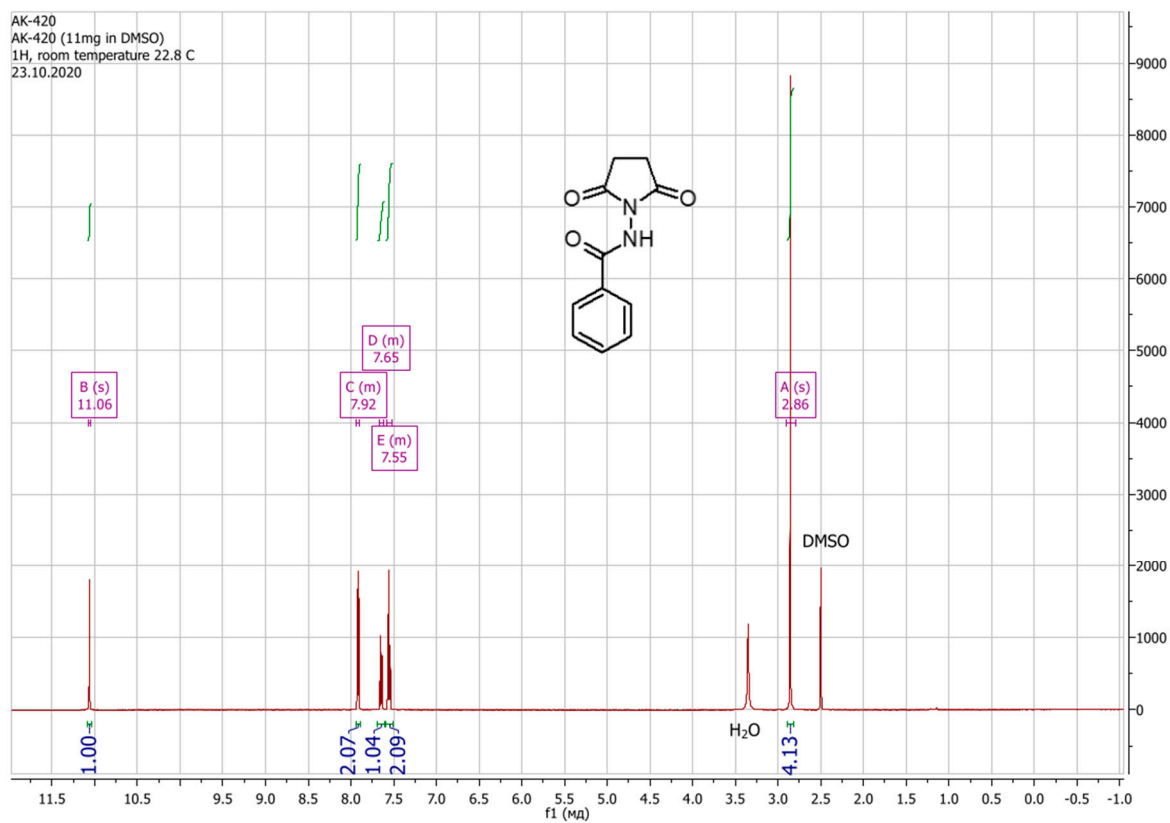
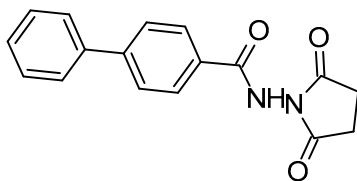


Figure S15: ^1H NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)benzamide ($\text{DMSO-}d_6$) (1g)

***N*-(2,5-dioxopyrrolidin-1-yl)[1,1'-biphenyl]-4-carboxamide (1h)**



Yield 1.15 g (39%) by one-pot approach and 1.27 g (43%) by two-step approach, colorless crystals (the amount of starting hydrazide 2.12 g). Found, %: C 69.24; H 4.88; N 9.70; O 16.38. $C_{17}H_{14}N_2O_3$. Calculated, %: C 69.38; H 4.79; N 9.52; O 16.31. IR spectrum, ν , cm^{-1} : 1712, 1685, 1607, 1536, 1486, 1417, 1277, 1196, 996, 910, 858, 816, 740, 695, 651, 612, 482, 438, 392, 378. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.87 (4H, s, $-CH_2-$), 7.44 (1H, t, $J = 7.3$, H-Ar), 7.52 (2H, t, $J = 7.5$, H-Ar), 7.77 (2H, d, $J = 7.7$, H-Ar), 7.87 (2H, d, $J = 8.1$, H-Ar), 8.02 (2H, d, $J = 8.1$, H-Ar), 11.11 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.9; 127.3; 127.4; 128.8; 128.9; 129.6; 130.3; 139.3; 144.5; 164.9; 174.8.

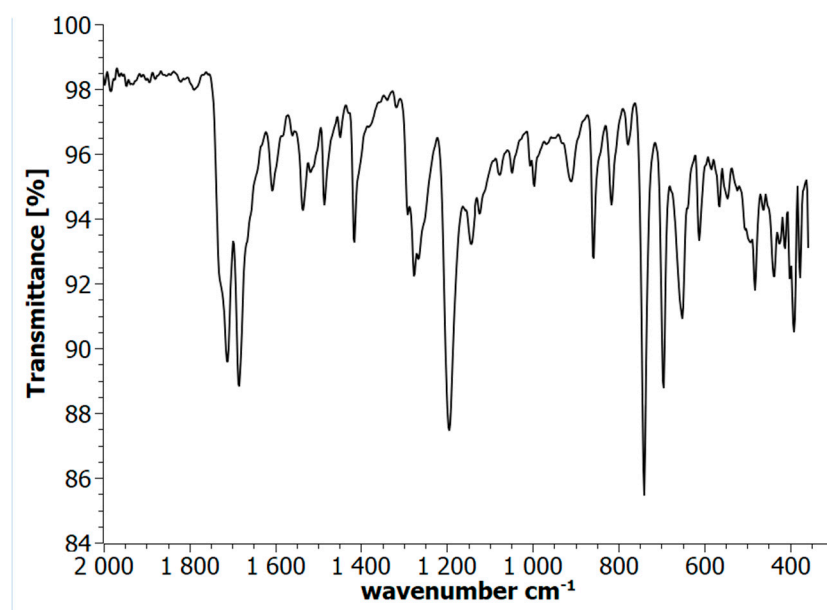
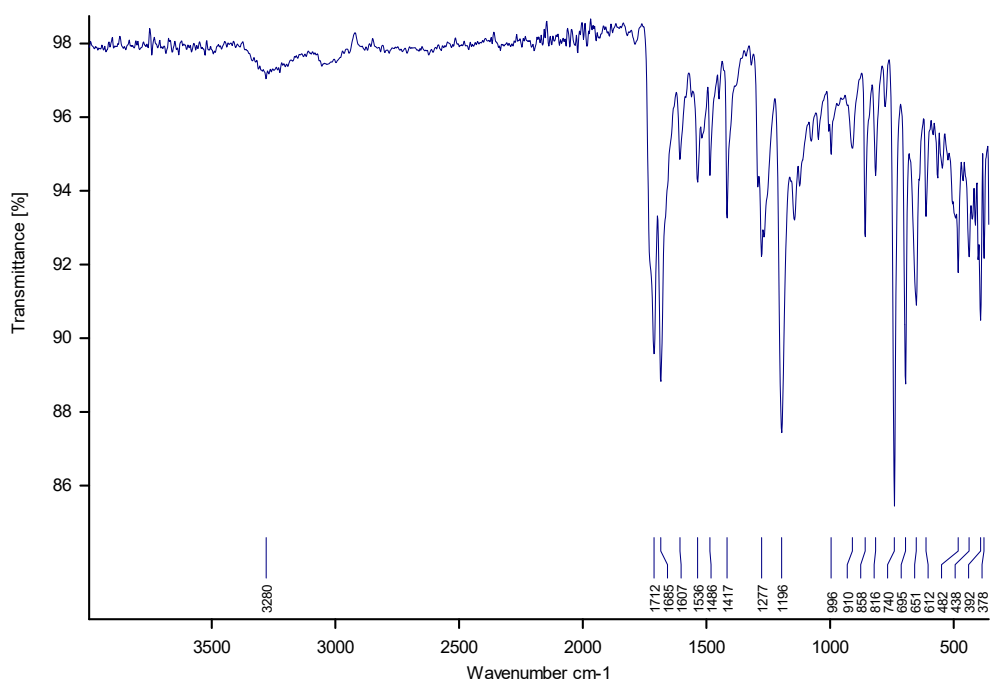


Figure S16: IR spectrum view of N-(2,5-dioxopyrrolidin-1-yl)[1,1'-biphenyl]-4-carboxamide (**1h**)

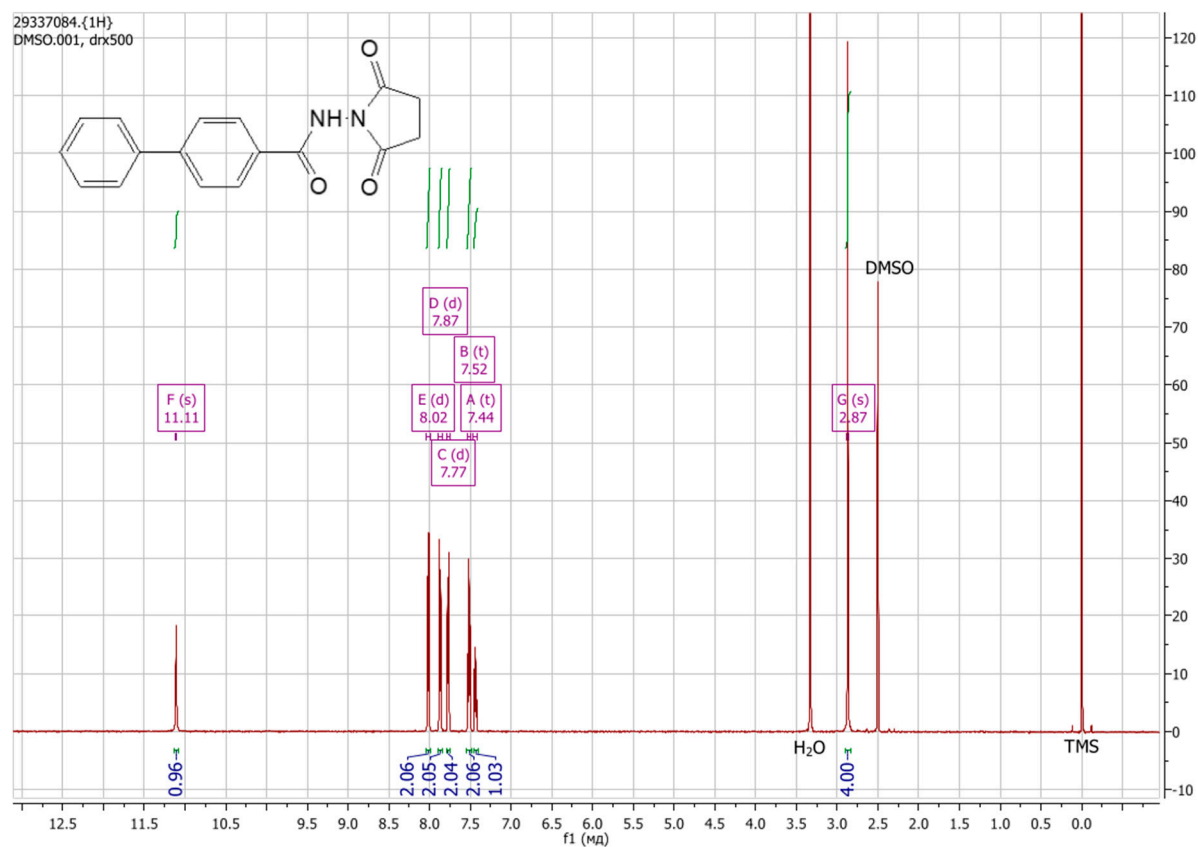


Figure S17: ¹H NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)[1,1'-biphenyl]-4-carboxamide (DMSO-*d*₆) (**1h**)

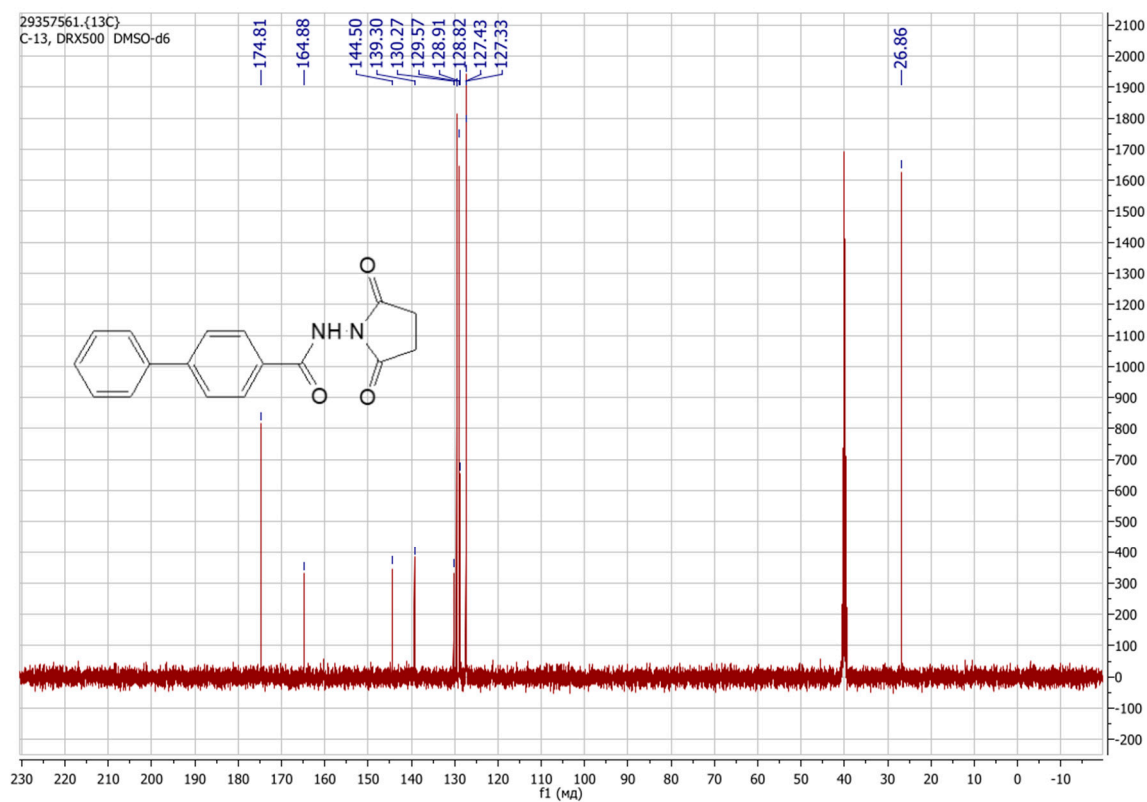
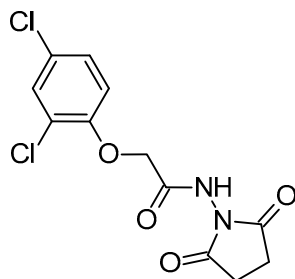


Figure S18: ^{13}C NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)[1,1'-biphenyl]-4-carboxamide (DMSO- d_6) (**1h**)

2-(2,4-dichlorophenoxy)-N-(2,5-dioxopyrrolidin-1-yl)acetamide (1i)



Yield 2.16 g (68%) by one-pot approach and 2.41 g (76%) by two-step approach, colorless crystals (the amount of starting hydrazide 2.35 g). Found, %: C 69.24; H 4.88; N 9.70; O 16.38. $C_{12}H_{10}Cl_2N_2O_4$. Calculated, %: C 45.45; H 3.18; Cl 22.36; N 8.83; O 20.18. IR spectrum, ν , cm^{-1} : 1793, 1722, 1678, 1542, 1483, 1437, 1412, 1291, 1243, 1222, 1186, 1106, 1076, 1045, 975, 893, 822, 806, 762, 688, 648, 603, 562, 435, 414, 395. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.79 (4H, s, $-CH_2-$), 4.91 (2H, s, $-CH_2-$), 7.13 (1H, d, $J = 8.9$, H-Ar), 7.39 (1H, dd, $J_1 = 8.9$, $J_2 = 2.5$, H-Ar), 7.61 (1H, d, $J = 2.5$, H-Ar), 10.76 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.8; 67.0; 116.1; 123.2; 126.0; 128.4; 129.9; 152.8; 166.4; 174.4.

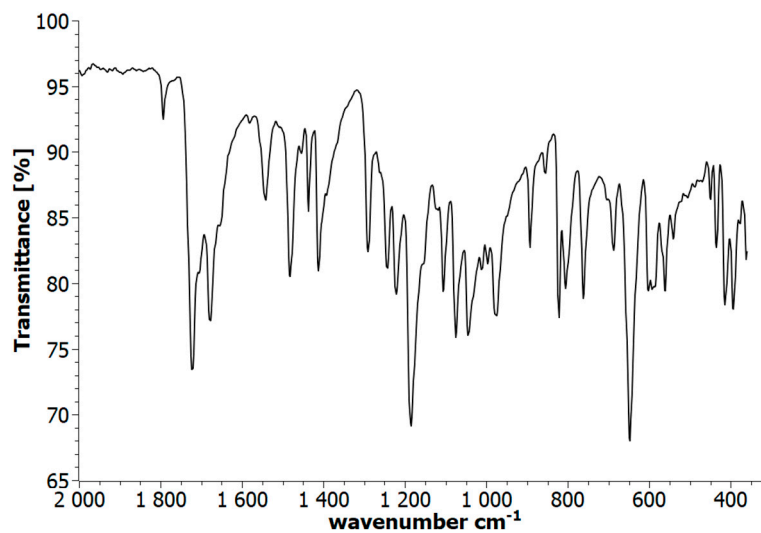
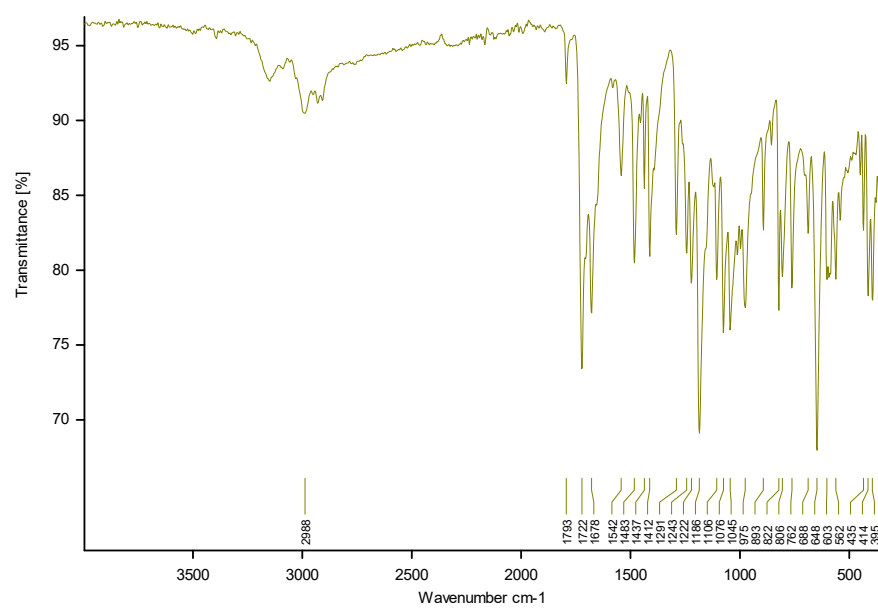


Figure S19: IR spectrum view of 2-(2,4-dichlorophenoxy)-*N*-(2,5-dioxopyrrolidin-1-yl)acetamide (**1i**)

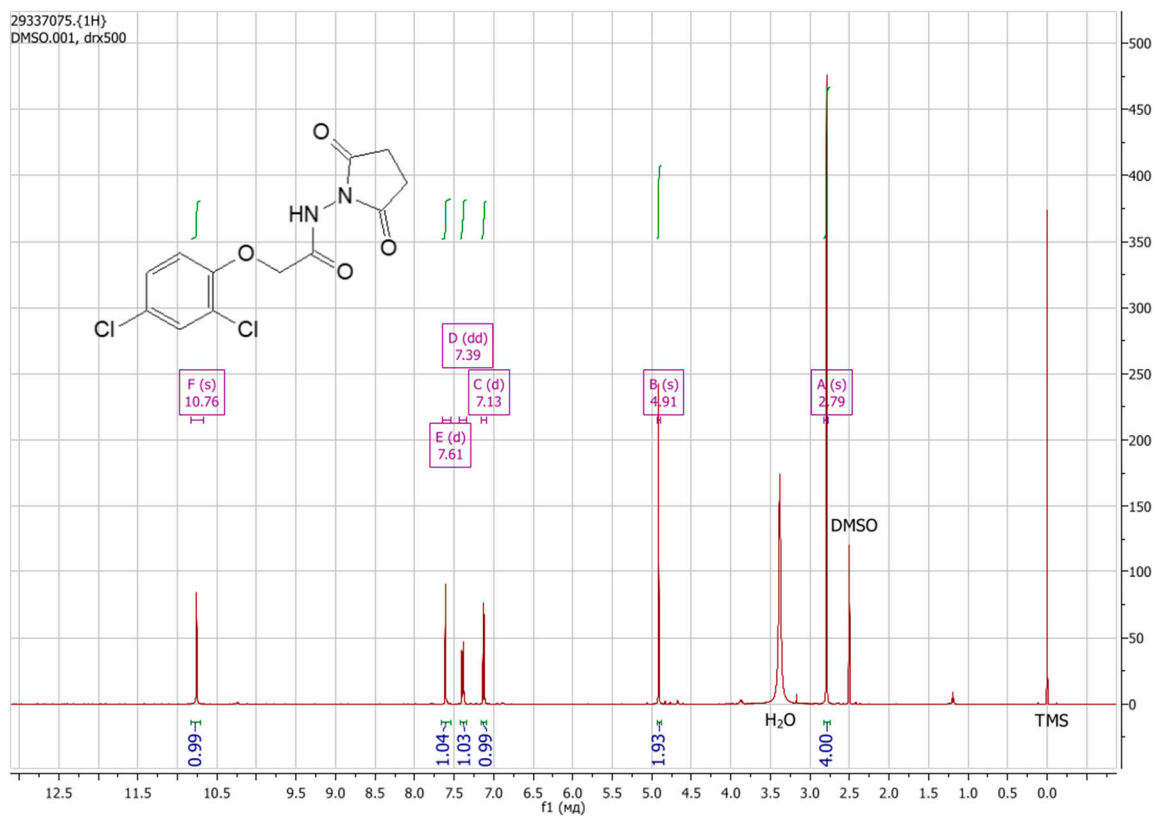


Figure S20: ^1H NMR spectrum view of 2-(2,4-dichlorophenoxy)-*N*-(2,5-dioxopyrrolidin-1-yl)acetamide (DMSO- d_6) (**1i**)

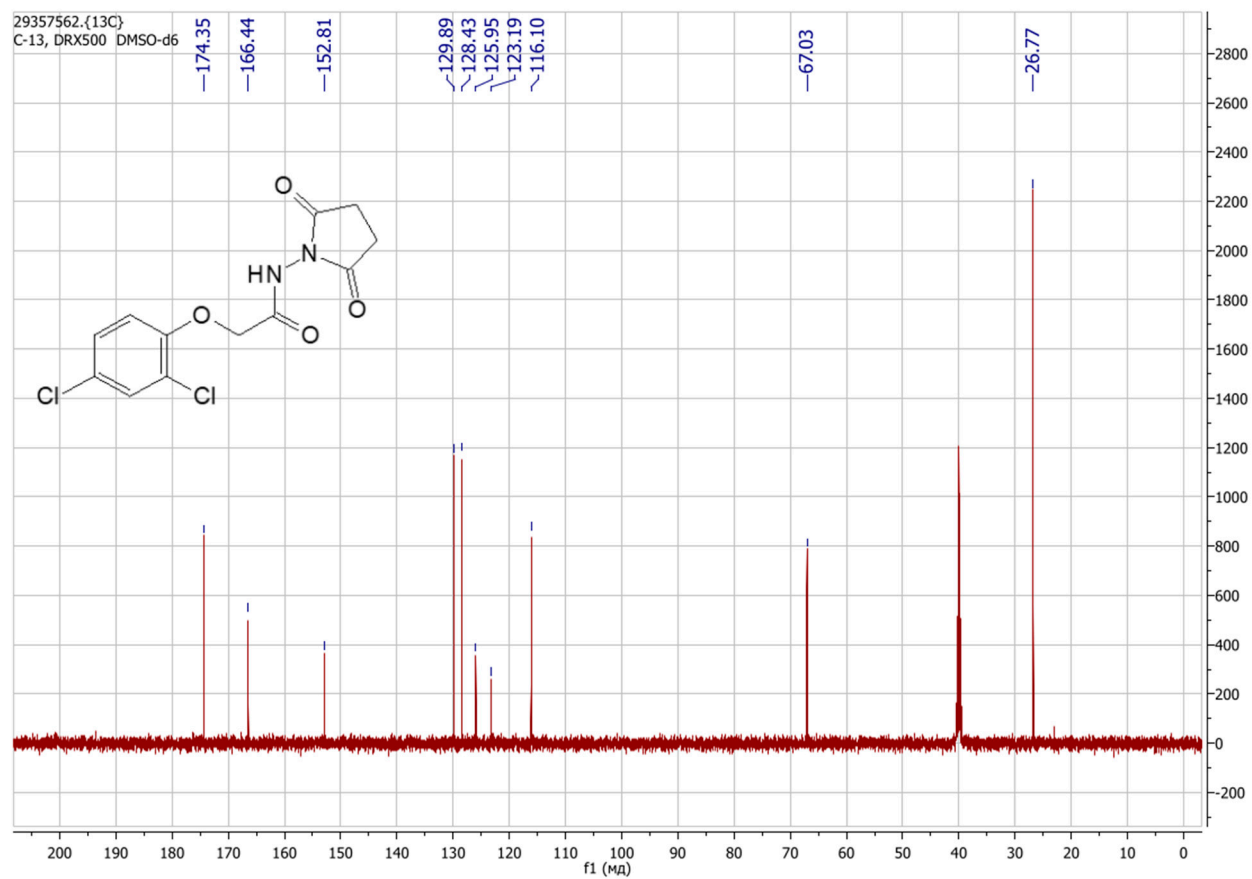
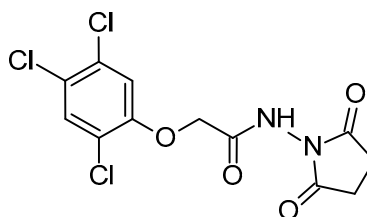


Figure S21: ^{13}C NMR spectrum view of 2-(2,4-dichlorophenoxy)-*N*-(2,5-dioxopyrrolidin-1-yl)acetamide (DMSO- d_6) (**1i**)

***N*-(2,5-dioxypyrrolidin-1-yl)-2-(2,4,5-trichlorophenoxy)acetamide (1j)**



Yield 1.47 g (42%) by one-pot approach and 1.54 g (44%) by two-step approach, colorless crystals (the amount of starting hydrazide 2.69 g). Found, %: C 40.89; H 3.65; N 8.02; O 18.31. $C_{12}H_9Cl_3N_2O_4$. Calculated, %: C 41.00; H 2.58; Cl 30.25; N 7.97; O 18.20. IR spectrum, ν , cm^{-1} : 3375, 2982, 1801, 1706, 1584, 1479, 1461, 1430, 1355, 1289, 1233, 1186, 1125, 1078, 1047, 1007, 925, 869, 848, 819, 757, 676, 616, 598, 576, 554, 534, 499, 426. 1H NMR spectrum (DMSO- d_6), ppm (*J*, Hz): 2.79 (4H, s, $-CH_2-$), 5.00 (2H, s, $-CH_2-$), 7.40 (1H, s, H-Ar), 7.85 (1H, s, H-Ar), 10.79 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.3; 66.7; 115.5; 116.1; 121.5; 123.7; 130.7; 152.7; 165.7; 173.9.

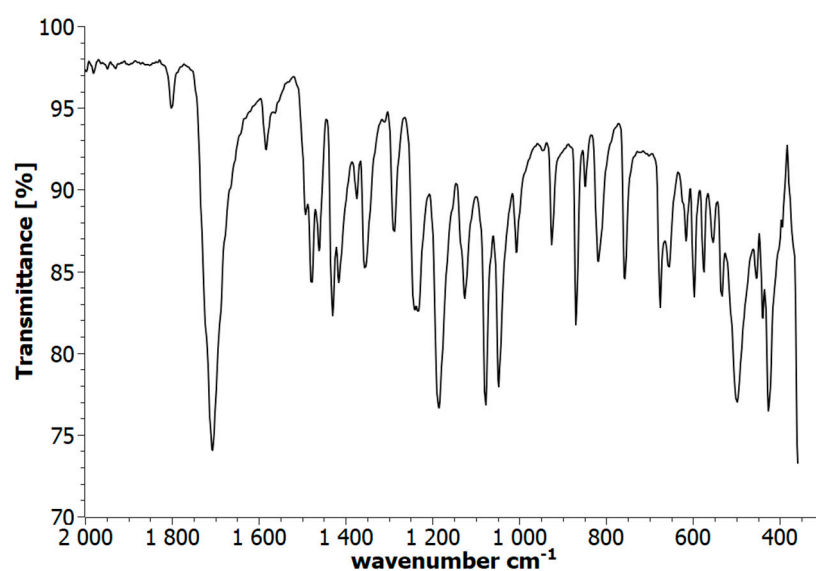
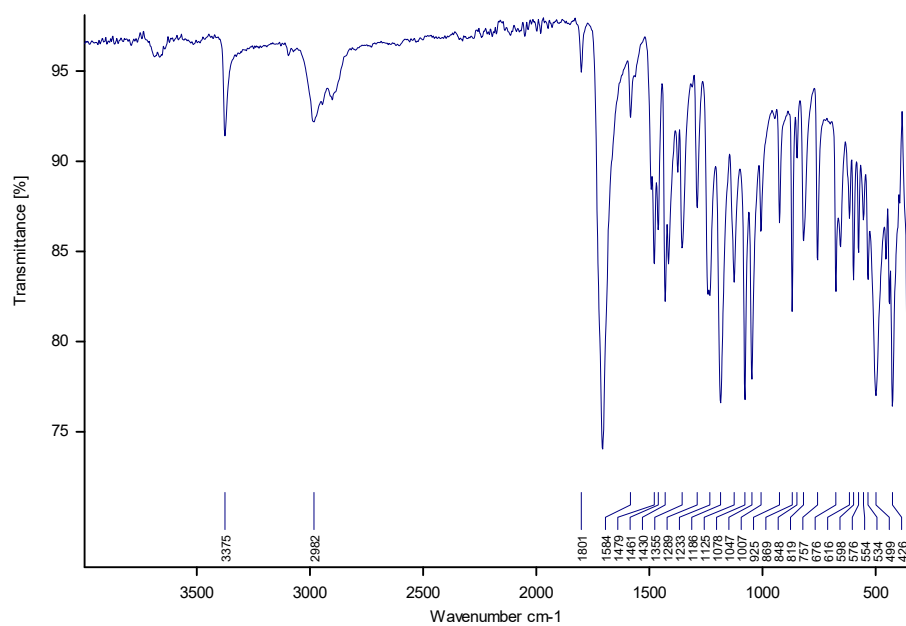


Figure S22: IR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(2,4,5-trichlorophenoxy)acetamide (**1j**)

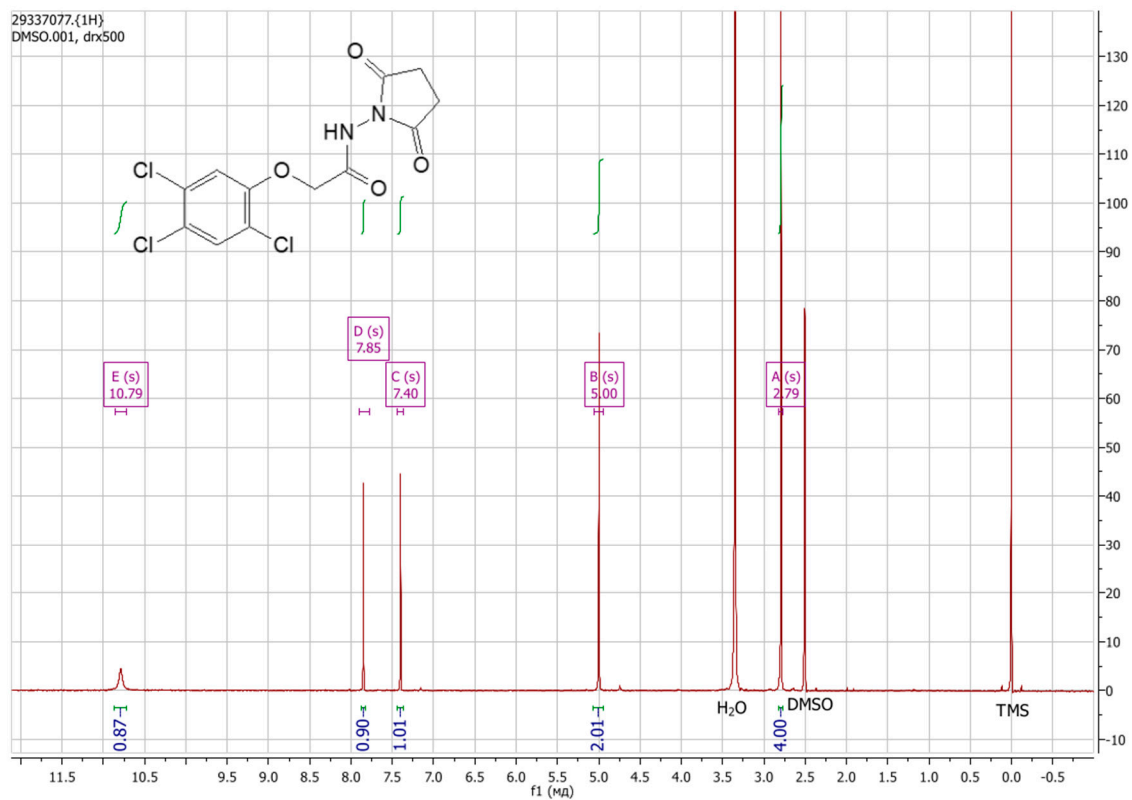


Figure S23: ^1H NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(2,4,5-trichlorophenoxy)acetamide ($\text{DMSO}-d_6$) (**1j**)

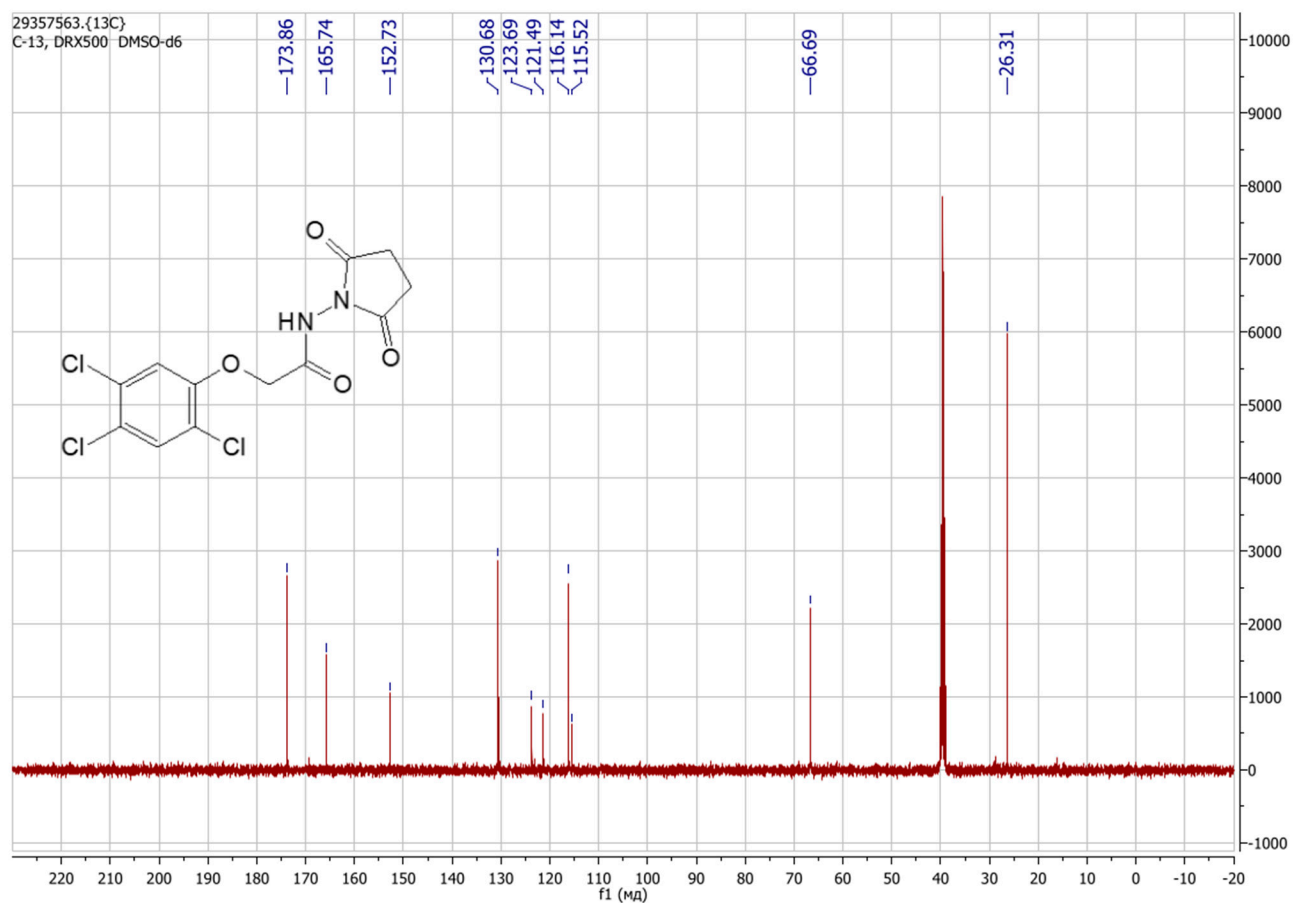
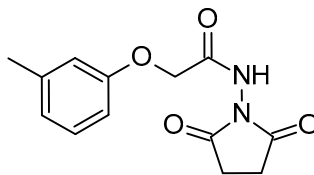


Figure S24: ¹³C NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(2,4,5-trichlorophenoxy)acetamide (DMSO-*d*₆) (**1j**)

***N*-(2,5-dioxopyrrolidin-1-yl)-2-(3-methylphenoxy)acetamide (1k)**



Yield 1.85 g (71%) by one-pot approach and 1.80 g (69%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.80 g). Found, %: C 59.48; H 5.41; N 10.75; O 24.51. $C_{13}H_{14}N_2O_4$. Calculated, %: C 59.54; H 5.38; N 10.68; O 24.40. IR spectrum, ν , cm^{-1} : 3237, 2975, 1727, 1688, 1591, 1491, 1410, 1248, 1170, 1121, 1084, 1046, 1000, 967, 930, 880, 820, 780, 692, 651, 583, 438, 401. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.29 (3H, s, -CH₃), 2.80 (4H, s, -CH₂-), 4.71 (2H, s, -CH₂-), 6.80 (2H, t, J = 7.3, H-Ar), 6.84 (1H, s, H-Ar), 7.19 (1H, t, J = 7.8, H-Ar), 10.75 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 21.6; 26.8; 66.3; 112.4; 115.9; 122.6; 129.7; 139.5; 158.0; 167.1; 174.4.

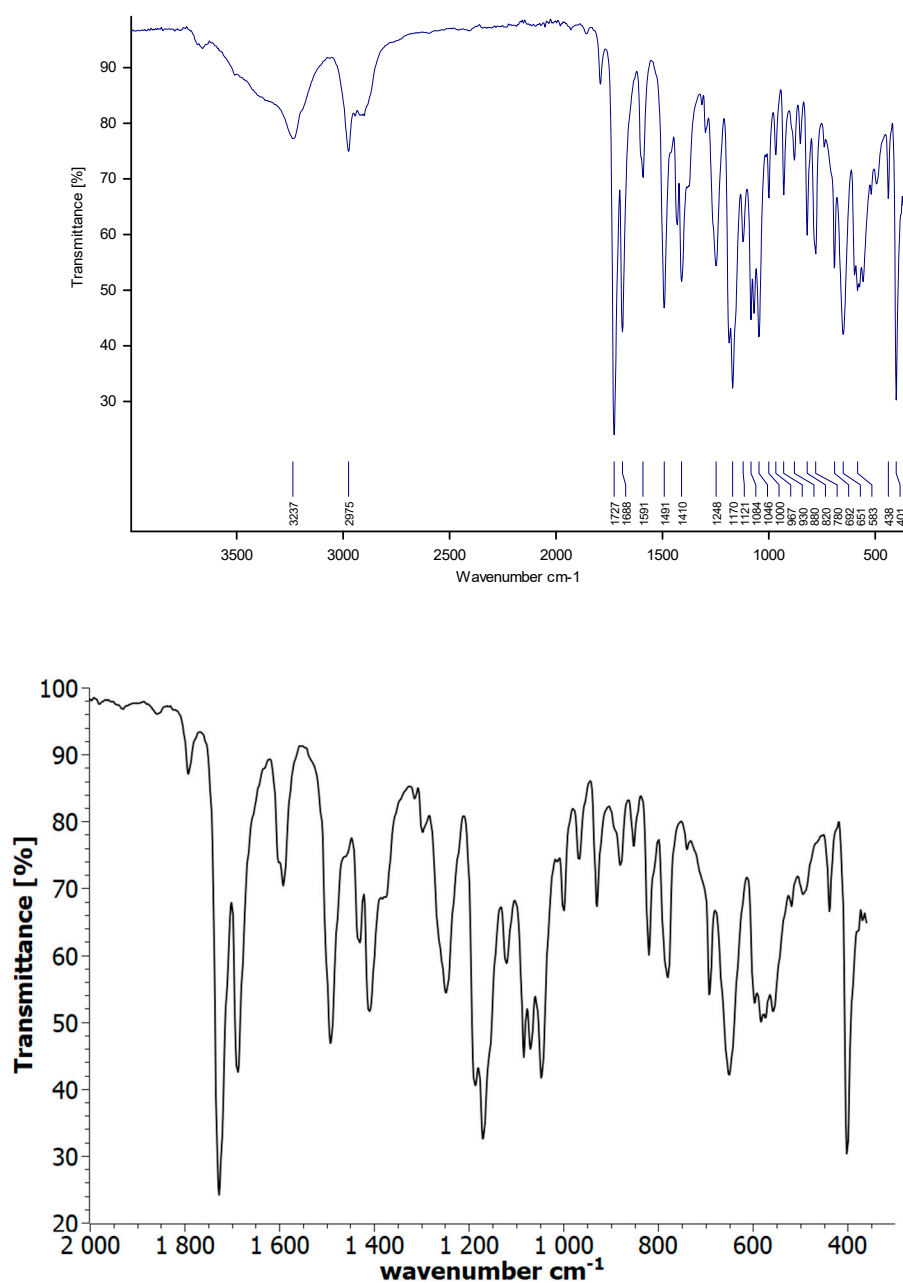


Figure S25: IR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(3-methylphenoxy)acetamide (**1k**)

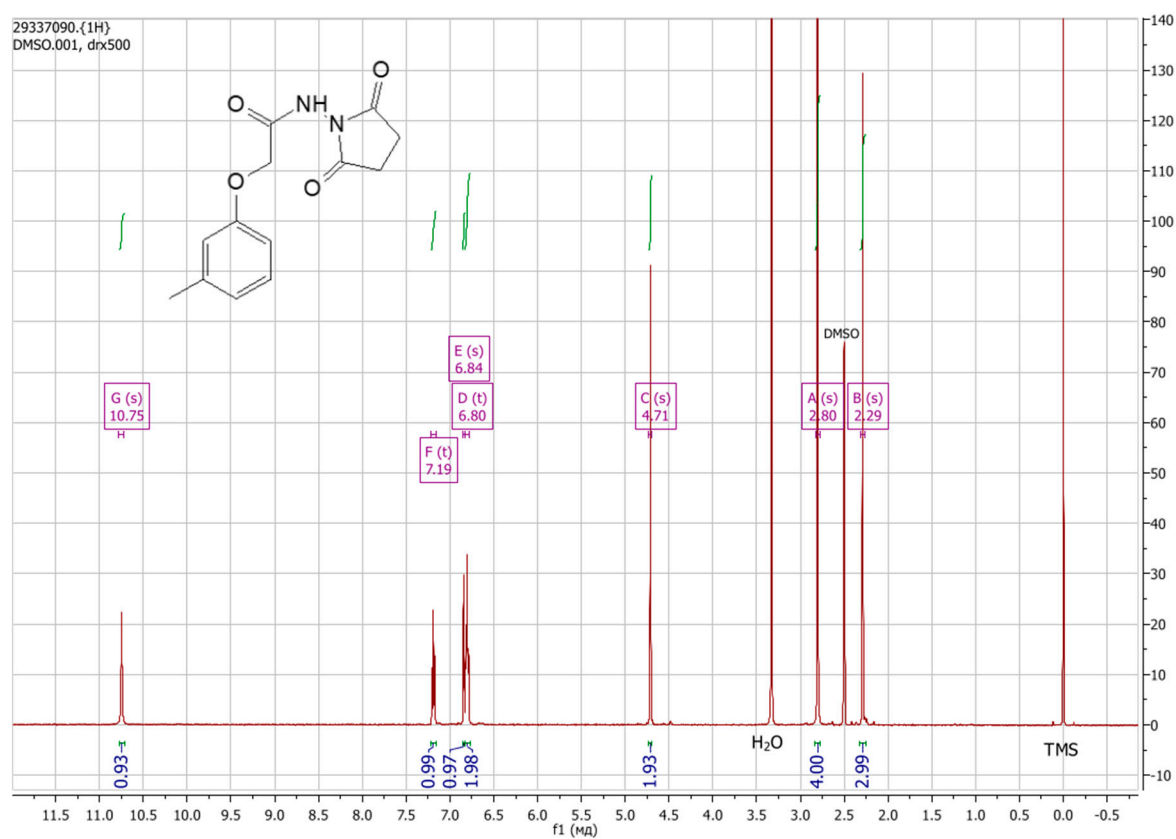


Figure S26: ^1H NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(3-methylphenoxy)acetamide (DMSO- d_6) (**1k**)

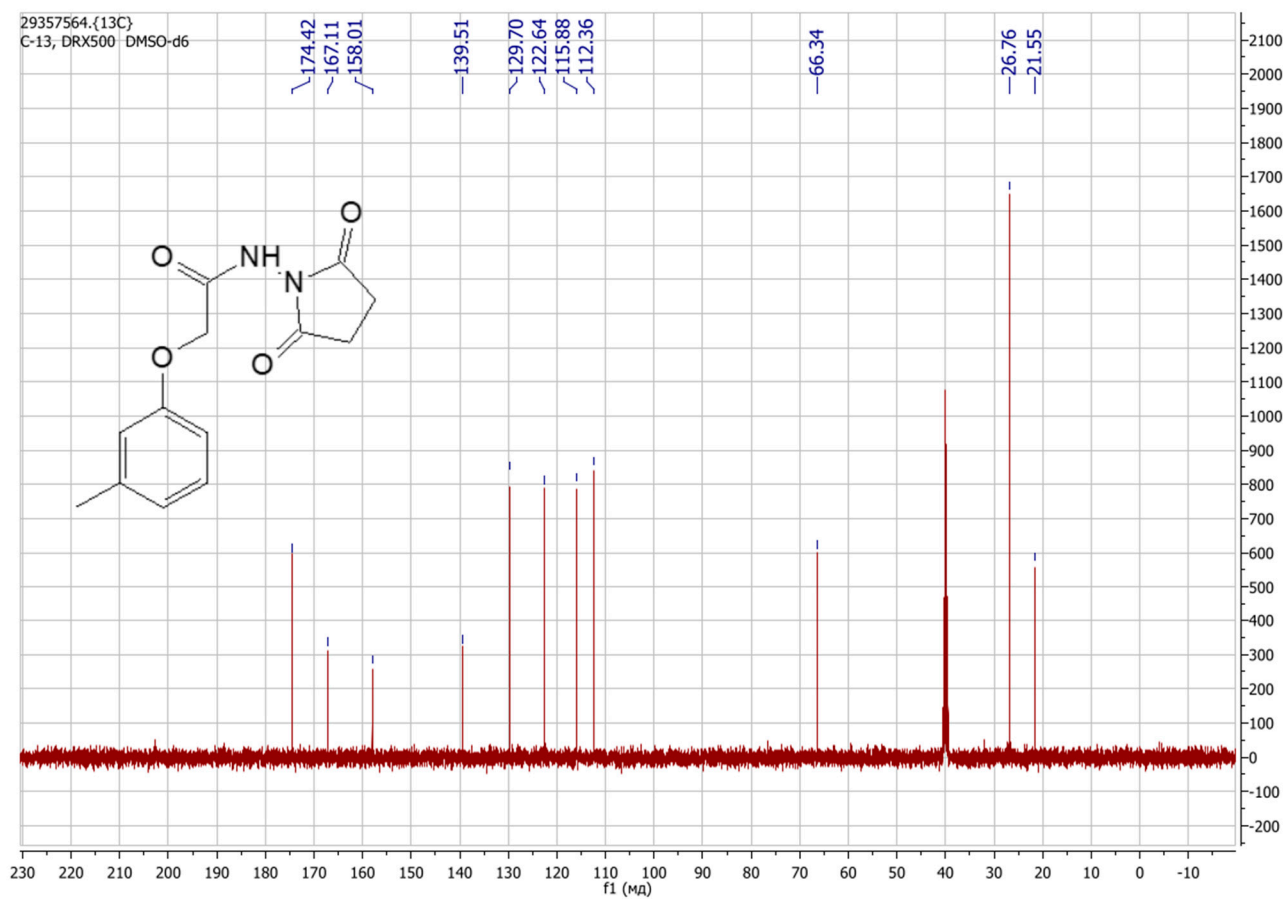
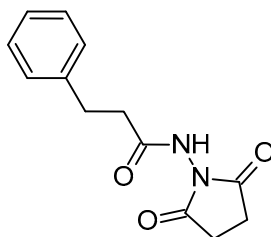


Figure S27: ^{13}C NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-(3-methylphenoxy)acetamide (DMSO- d_6) (**1k**)

***N*-(2,5-dioxopyrrolidin-1-yl)-3-phenylpropanamide (11)**



Yield 1.12 g (46%) by one-pot approach and 1.10 g (45%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.64 g). Found, %: C 63.51; H 5.68; N 11.35; O 19.59. $C_{13}H_{14}N_2O_3$. Calculated, %: C 63.40; H 5.73; N 11.38; O 19.49. IR spectrum, ν , cm^{-1} : 3347, 2938, 1729, 1699, 1489, 1452, 1409, 1375, 1296, 1184, 1079, 976, 809, 781, 755, 708, 646, 611, 554, 508, 426, 376. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.56 (2H, t, J = 7.8, -CH $_2$ -), 2.76 (4H, s, -CH $_2$ -), 2.86 (2H, t, J = 7.8, -CH $_2$ -), 7.19 (1H, t, J = 6.9, H-Ar), 7.23-7.31 (4H, m, H-Ar), 10.44 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.3; 30.5; 34.6; 126.1; 128.26; 128.33; 140.7; 170.1; 174.2.

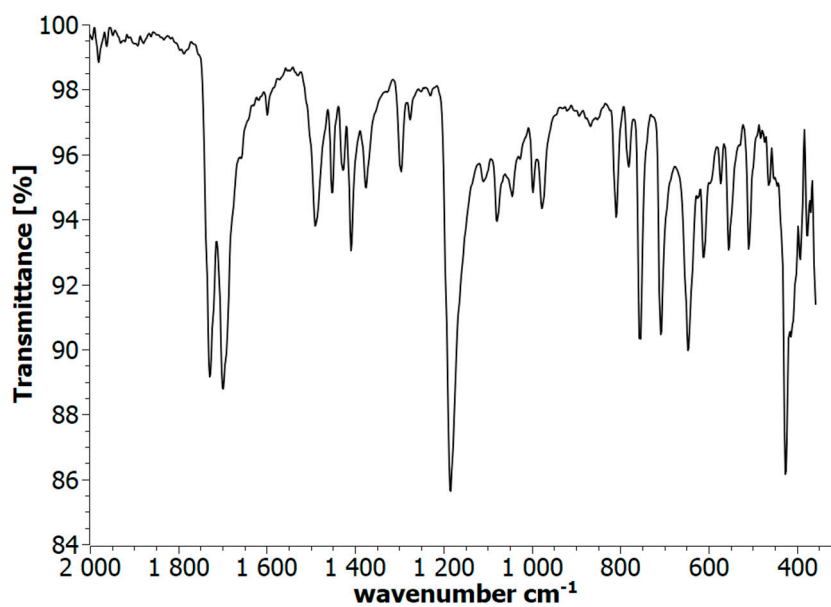
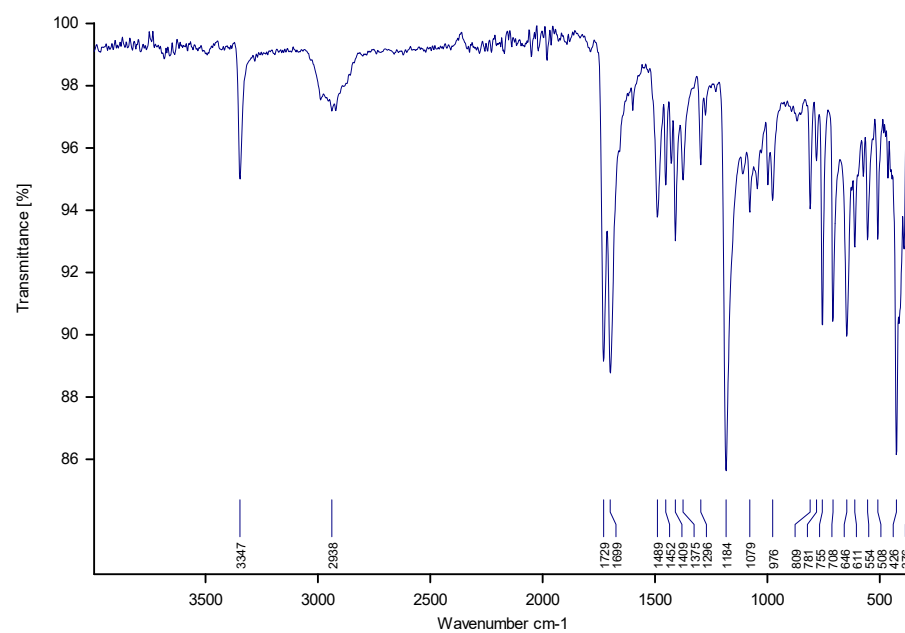


Figure S28: IR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-3-phenylpropanamide (**11**)

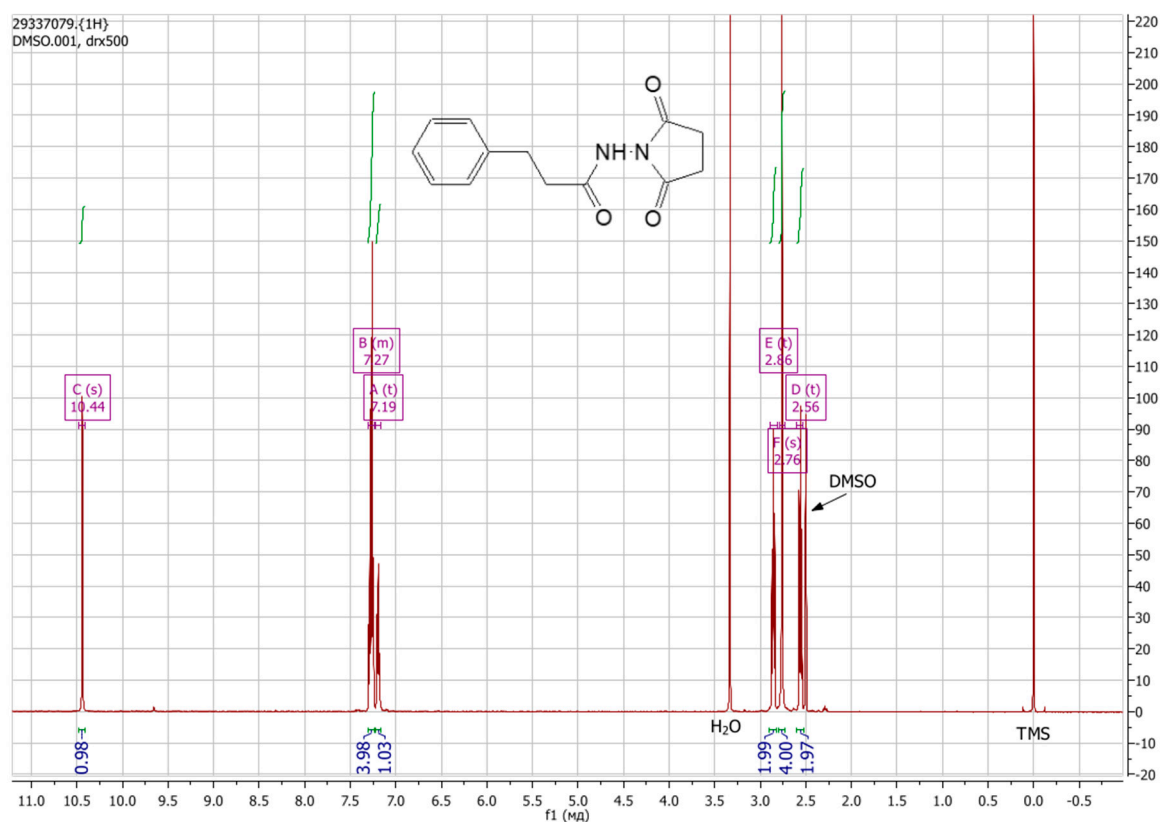


Figure S.29: ^1H NMR spectrum view of N-(2,5-dioxopyrrolidin-1-yl)-3-phenylpropanamide ($\text{DMSO}-d_6$) (**11**)

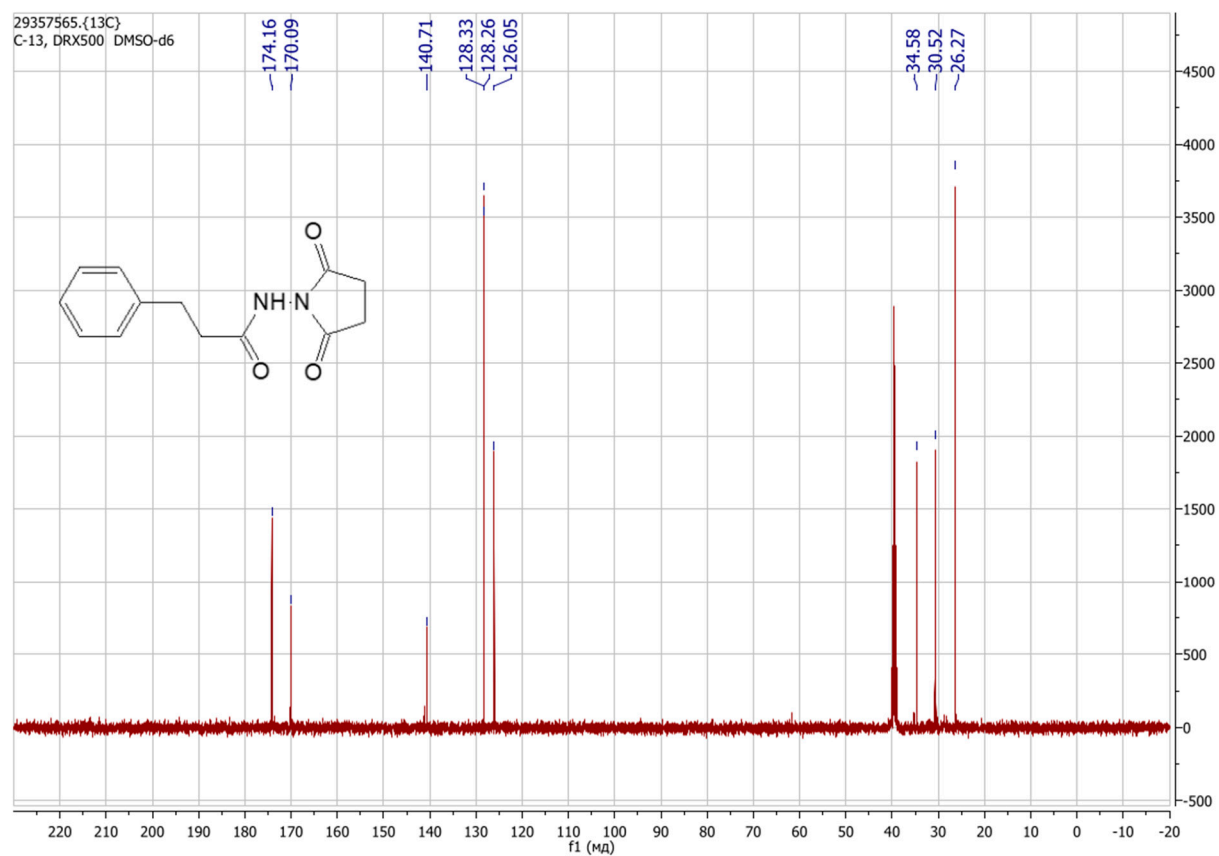
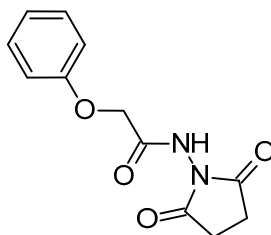


Figure S.30: ^{13}C NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-3-phenylpropanamide (DMSO- d_6) (**11**)

***N*-(2,5-dioxopyrrolidin-1-yl)-2-phenoxyacetamide (1m)**



Yield 1.91 g (77%) by one-pot approach and 1.99 g (80%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.66 g). Found, %: C 57.99; H 4.96; N 11.24; O 25.84. $C_{12}H_{12}N_2O_4$. Calculated, %: C 58.06; H 4.87; N 11.29; O 25.78. IR spectrum, ν , cm^{-1} : 3311, 2988, 1704, 1589, 1491, 1433, 1411, 1371, 1298, 1229, 1193, 1121, 1080, 1065, 889, 845, 812, 753, 691, 665, 601, 584, 505, 475, 385. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.81 (4H, s, -CH₂-), 4.74 (2H, s, -CH₂-), 6.97-7.04 (3H, m, H-Ar), 7.32 (2H, t, J = 7.8, H-Ar), 10.76 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.8; 66.4; 115.3; 122.0; 130.0; 158.0; 167.0; 174.4.

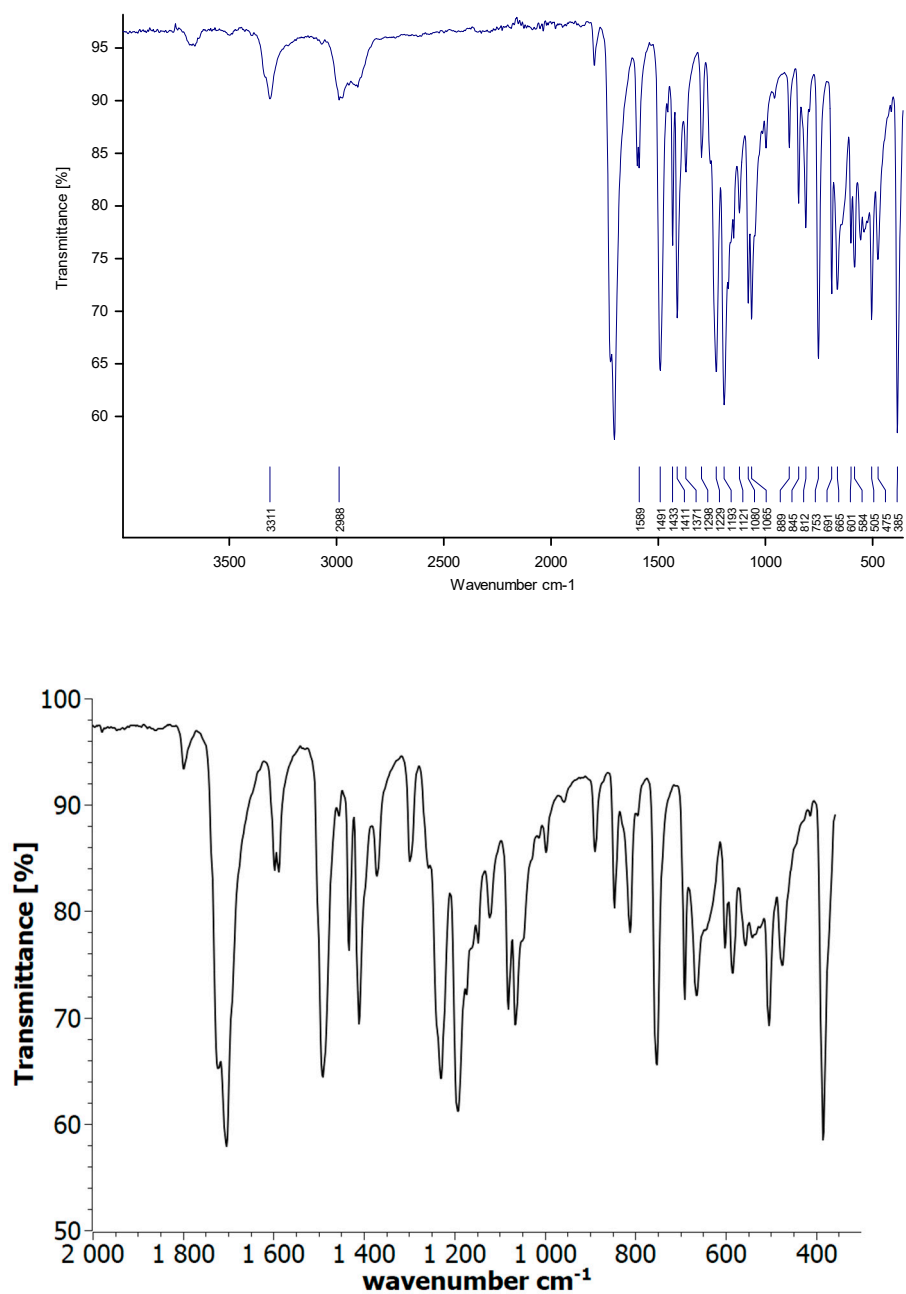


Figure S31: IR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-phenoxyacetamide (**1m**)

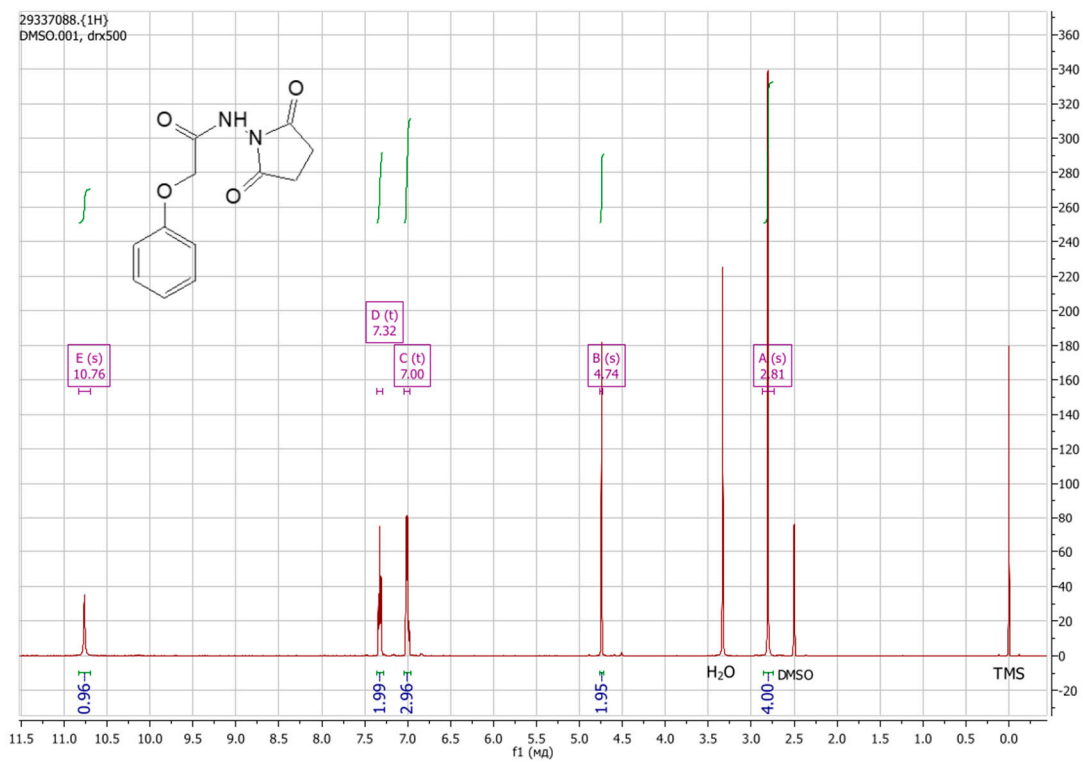


Figure S32: ^1H NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-phenoxyacetamide (DMSO- d_6) (**1m**)

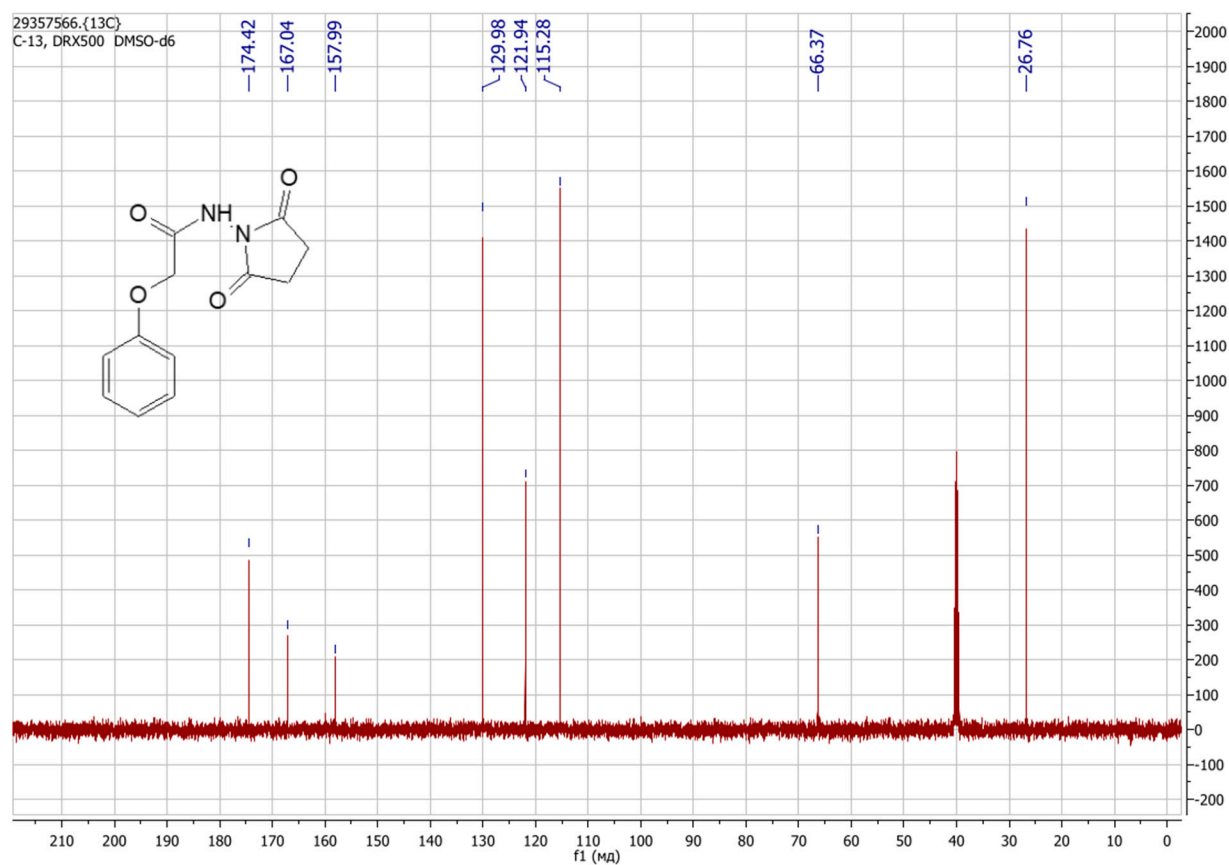
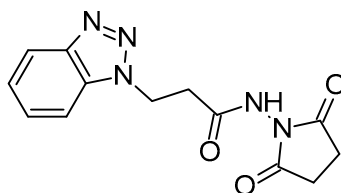


Figure S33: ^{13}C NMR spectrum view of *N*-(2,5-dioxopyrrolidin-1-yl)-2-phenoxyacetamide (DMSO- d_6) (**1m**)

3-(1*H*-benzotriazol-1-yl)-*N*-(2,5-dioxopyrrolidin-1-yl)propenamide (1n)



Yield 1.52 g (53%) by one-pot approach and 1.73 g (60%) by two-step approach, colorless crystals (the amount of starting hydrazide 2.05 g). Found, %: C 54.41; H 4.62; N 24.31; O 16.77. $C_{13}H_{13}N_5O_3$. Calculated, %: C 54.35; H 4.56; N 24.38; O 16.71. IR spectrum, ν , cm^{-1} : 2943, 1729, 1693, 1544, 1457, 1409, 1381, 1317, 1266, 1187, 1162, 1114, 1017, 999, 967, 826, 749, 654, 617, 586, 561, 440, 429, 386. ^1H NMR spectrum ($\text{DMSO}-d_6$), ppm (J , Hz): 2.73 (4H, s, $-\text{CH}_2-$), 3.10 (2H, t, $J = 6.7$, $-\text{CH}_2-$), 4.92 (2H, t, $J = 6.7$, $-\text{CH}_2-$), 7.40 (1H, t, $J = 7.6$, H-Ar), 7.54 (1H, t, $J = 7.6$, H-Ar), 7.88 (1H, d, $J = 8.3$, H-Ar), 8.03 (1H, d, $J = 8.3$, H-Ar), 10.60 (1H, s, N-H). ^{13}C NMR spectrum ($\text{DMSO}-d_6$), δ , ppm: 26.7; 33.3; 43.5; 111.4; 119.4; 124.4; 127.6; 133.4; 145.6; 168.5; 174.4.

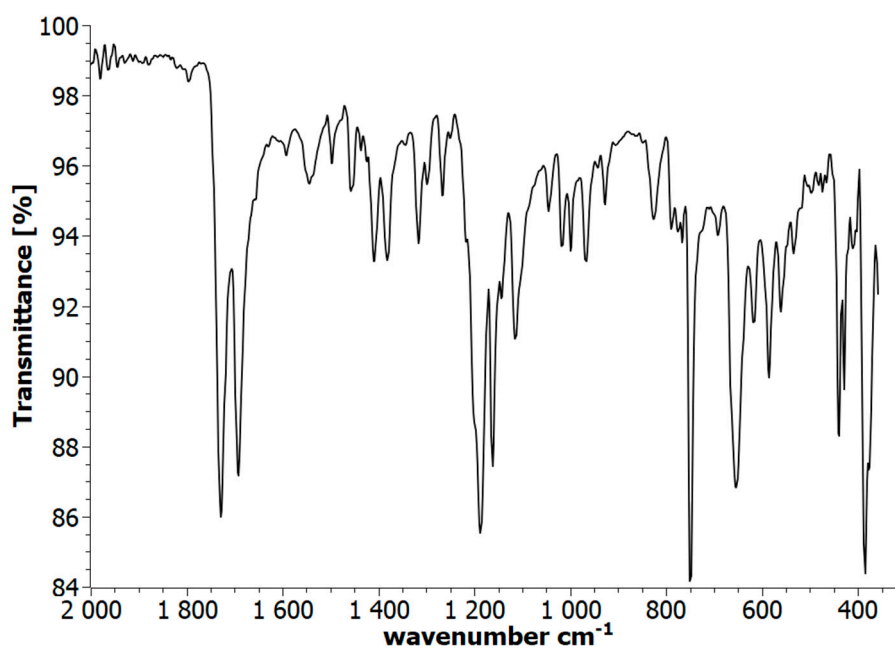
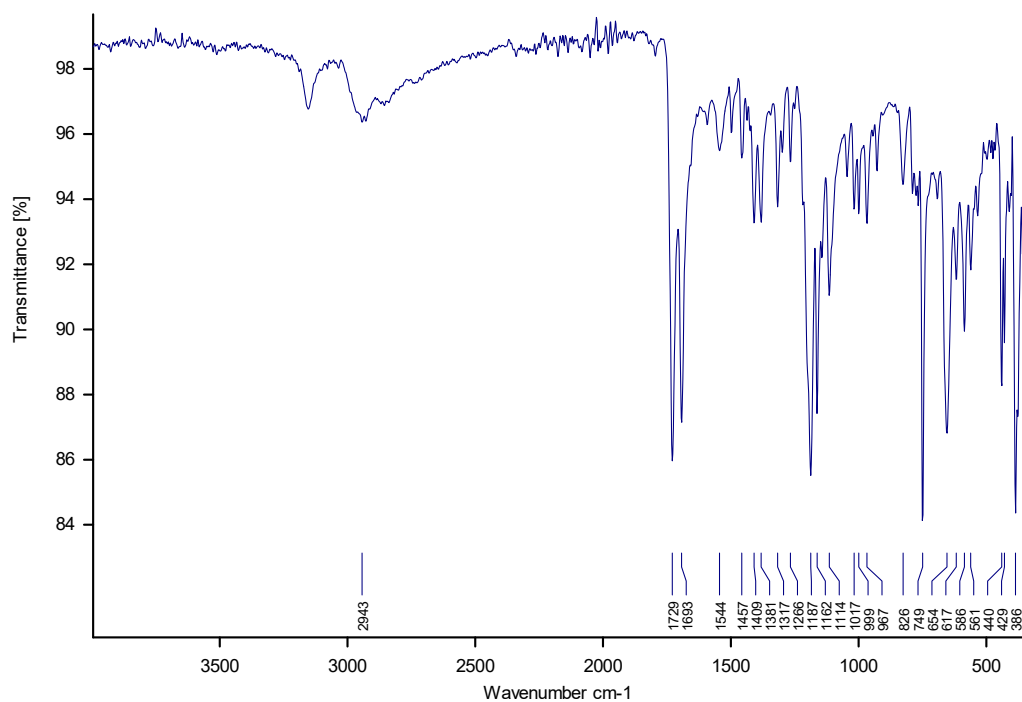


Figure S34: IR spectrum view of 3-(1*H*-benzotriazol-1-yl)-*N*-(2,5-dioxopyrrolidin-1-yl)propenamide (**1n**)

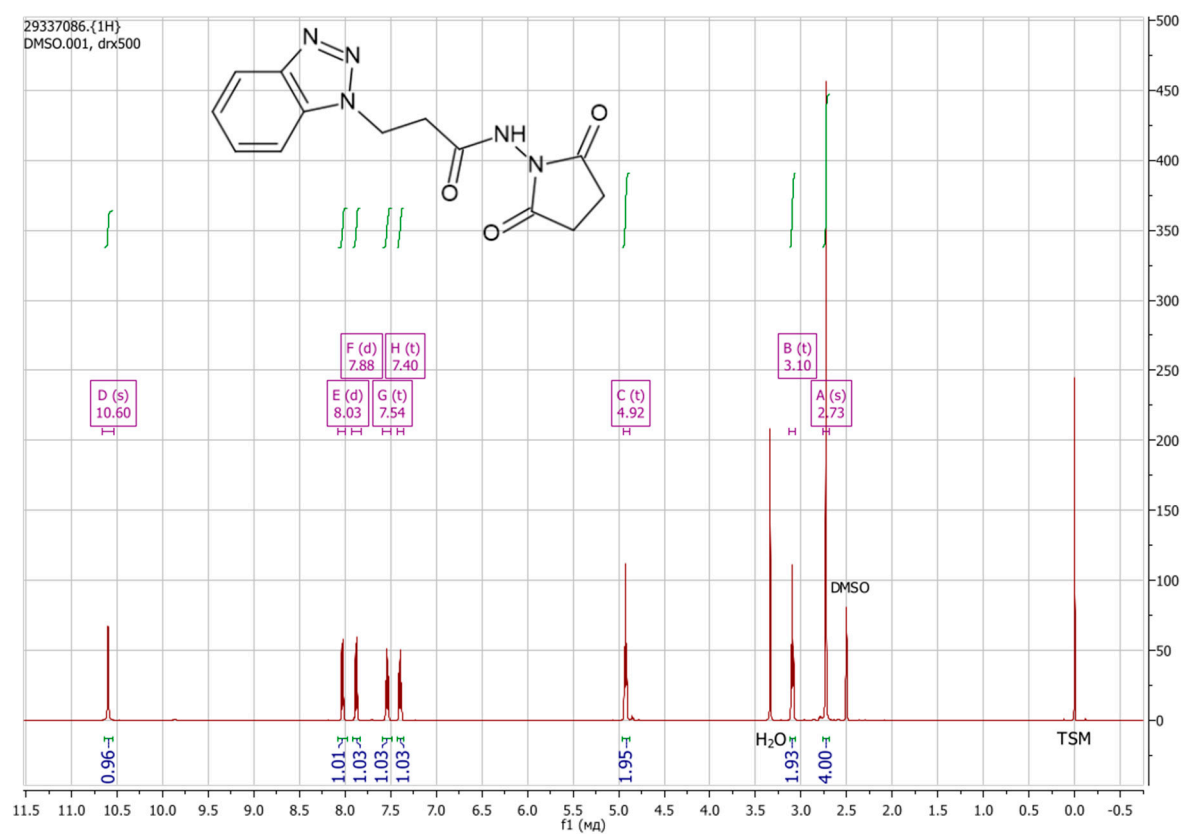


Figure S35: ¹H NMR spectrum view of 3-(1*H*-benzotriazol-1-yl)-*N*-(2,5-dioxopyrrolidin-1-yl)propanamide (DMSO-*d*₆) (**1n**)

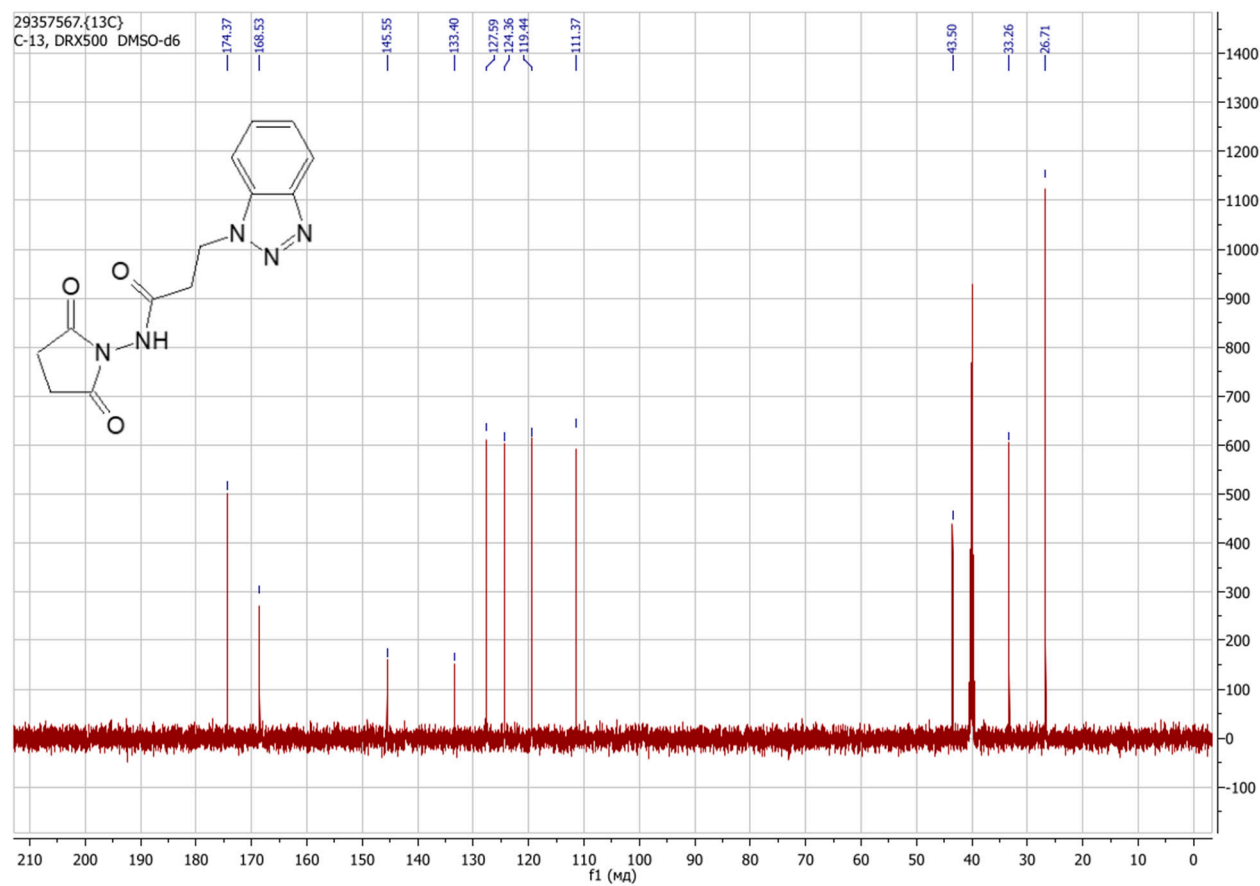
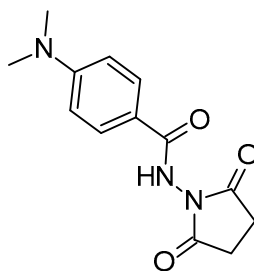


Figure S36: ^{13}C NMR spectrum view of 3-(1H-benzotriazol-1-yl)-N-(2,5-dioxopyrrolidin-1-yl)propenamide (DMSO- d_6) (**1n**)

4-(dimethylamino)-N-(2,5-dioxopyrrolidin-1-yl)benzamide (1o)



Yield 1.54 g (59%) by one-pot approach and 1.83 g (70%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.79 g). Found, %: C 59.67; H 5.94; N 15.96; O 18.49. $C_{13}H_{15}N_3O_3$. Calculated, %: C 59.76; H 5.79; N 16.08; O 18.37. IR spectrum, ν , cm^{-1} : 3676, 3225, 2988, 2901, 1730, 1637, 1604, 1543, 1510, 1448, 1412, 1377, 1336, 1290, 1189, 1137, 1066, 944, 907, 824, 764, 698, 652, 622, 584, 500, 491, 443, 381. 1H NMR spectrum (DMSO- d_6), ppm (J , Hz): 2.82 (4H, s, $-CH_2-$), 3.00 (6H, s, $-CH_3$), 6.75 (2H, d, $J = 8.5$, Ar-H), 7.78 (2H, d, $J = 8.4$, Ar-H), 10.58 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.3; 39.6; 110.8; 117.2; 129.2; 152.8; 164.4; 174.6.

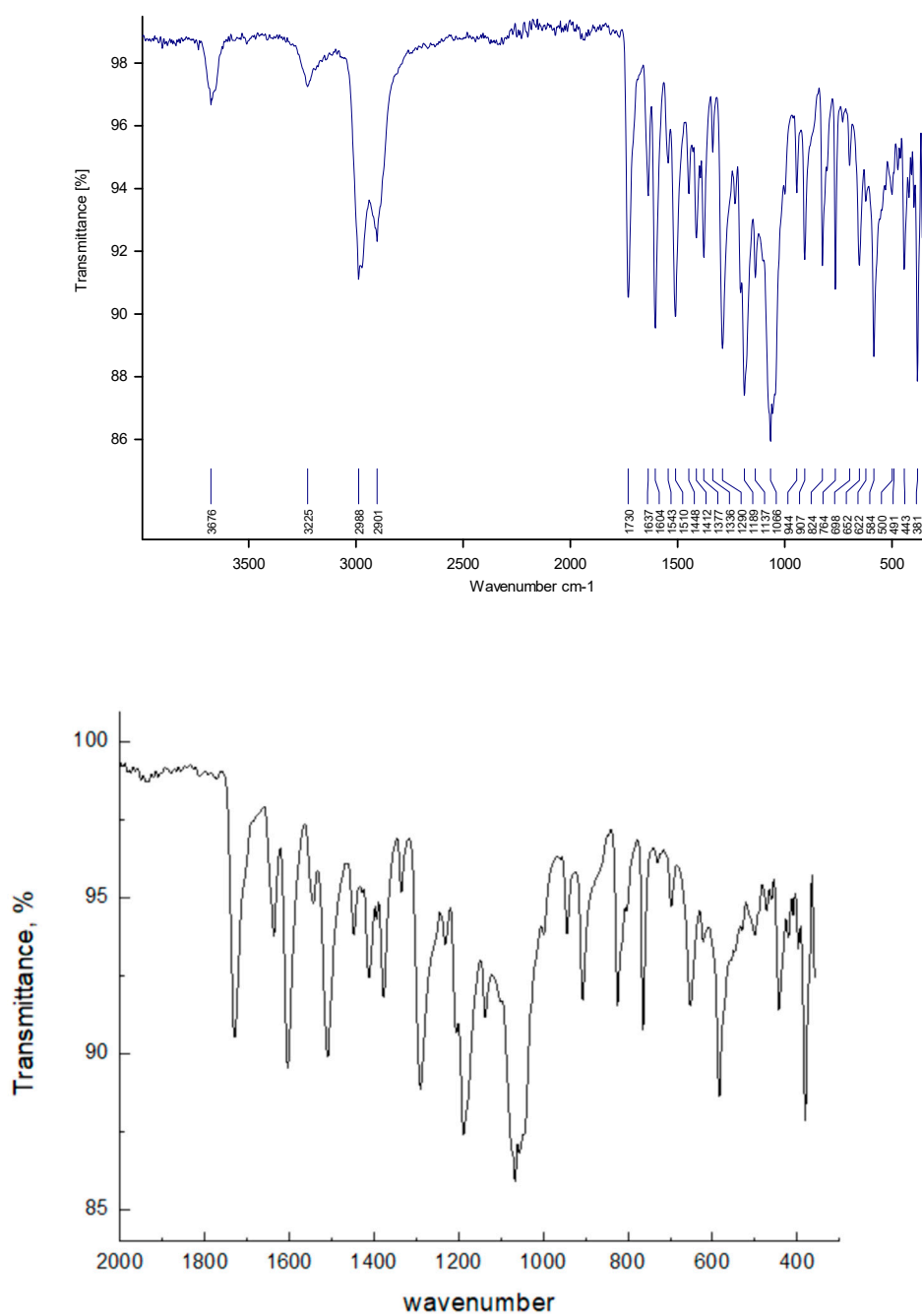


Figure S37: IR spectrum view of 4-(dimethylamino)-*N*-(2,5-dioxopyrrolidin-1-yl)benzamide (**1o**)

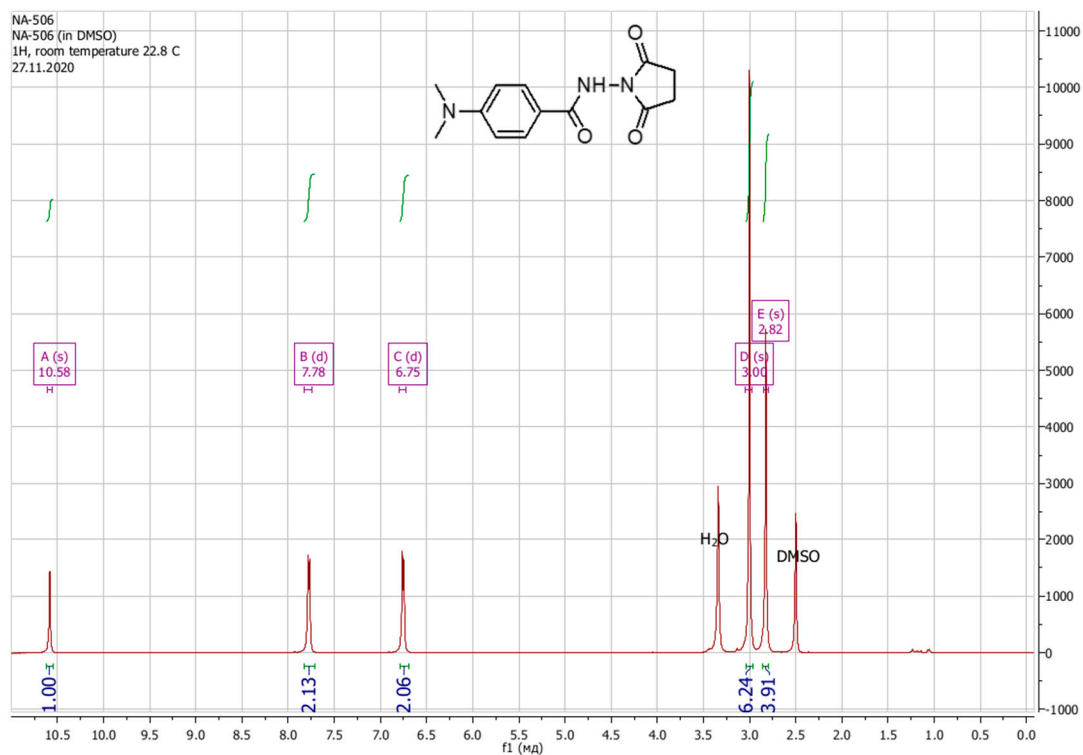


Figure S38: NMR ^1H spectrum view of 4-(dimethylamino)-*N*-(2,5-dioxopyrrolidin-1-yl)benzamide ($\text{DMSO}-d_6$) (**1o**)

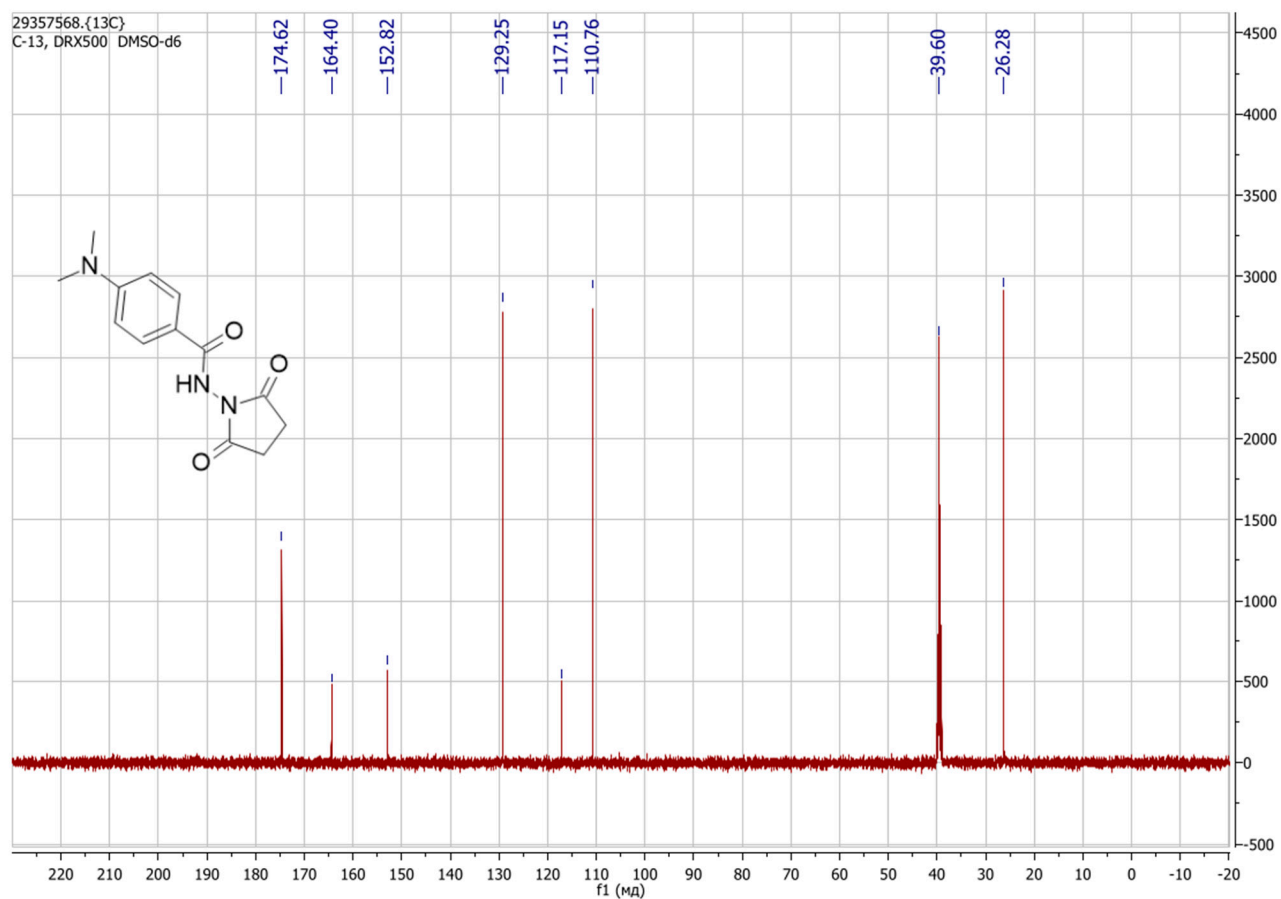
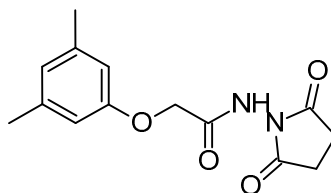


Figure S39: NMR ^{13}C spectrum view of 4-(dimethylamino)-*N*-(2,5-dioxopyrrolidin-1-yl)benzamide (DMSO- d_6) (**1o**)

2-(3,5-dimethylphenoxy)-N-(2,5-dioxopyrrolidin-1-yl)acetamide (1p)



Yield 2.24 g (81%) by one-pot approach and 2.43 g (88%) by two-step approach, colorless crystals (the amount of starting hydrazide 1.94 g). Found, %: C 60.70; H 5.98; N 10.03; O 23.19. $C_{14}H_{16}N_2O_4$. Calculated, %: C 60.86; H 5.84; N 10.14; O 23.16. IR spectrum, ν , cm^{-1} : 2985, 2912, 1719, 1645, 1595, 1476, 1421, 1396, 1321, 1297, 1192, 1157, 1028, 975, 838, 822, 748, 682, 505, 475, 439, 398, 373. 1H NMR spectrum (DMSO- d_6), ppm (J, Hz): 2.24 (6H, s, CH_3), 2.80 (4H, s, $-CH_2-$), 4.68 (2H, s, $O-CH_2-$), 6.63 (3H, s, Ar-H), 10.74 (1H, s, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 21.0; 26.3; 65.8; 112.6; 123.0; 138.7; 157.6; 166.7; 174.0.

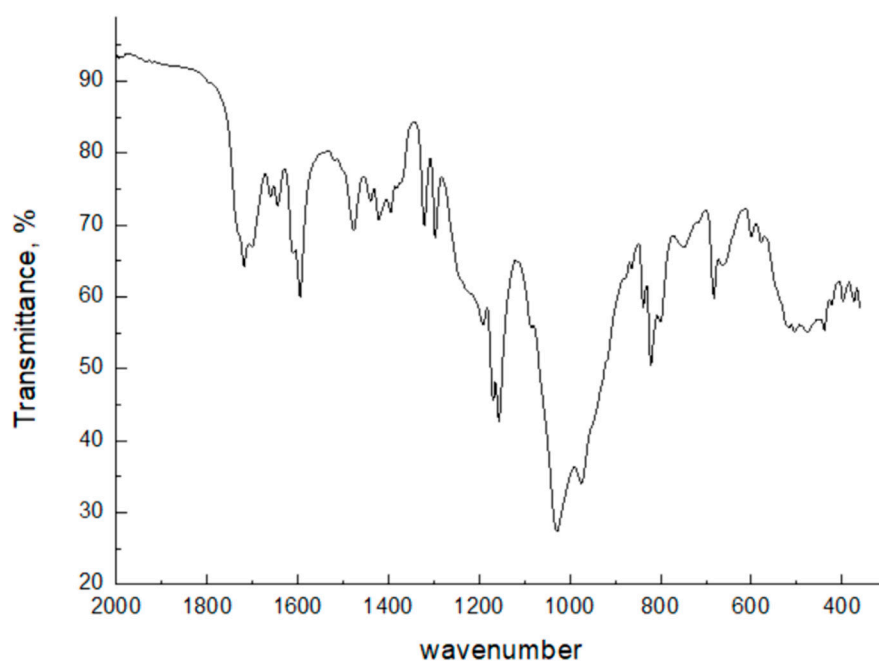
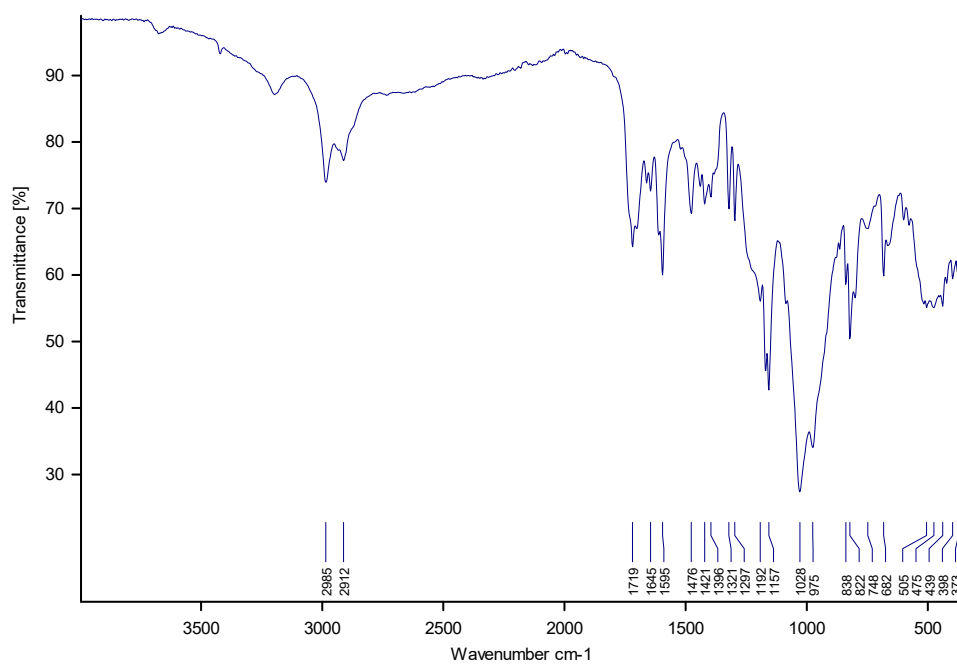


Figure S40: IR spectrum view of 2-(3,5-dimethylphenoxy)-*N*-(2,5-dioxopyrrolidin-1-yl)acetamide (**1p**)

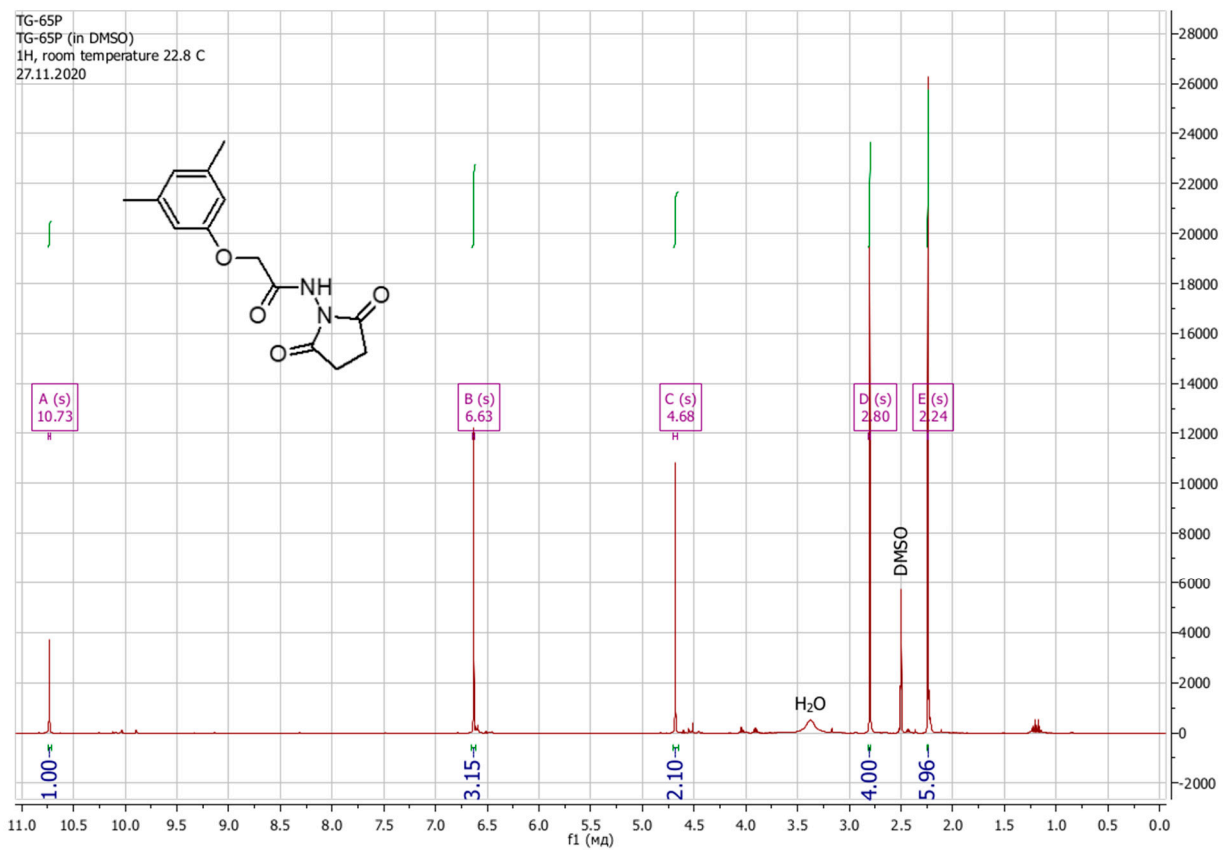


Figure S41: ¹H NMR spectrum view of 2-(3,5-dimethylphenoxy)-N-(2,5-dioxopyrrolidin-1-yl)acetamide (DMSO-*d*₆) (**1p**)

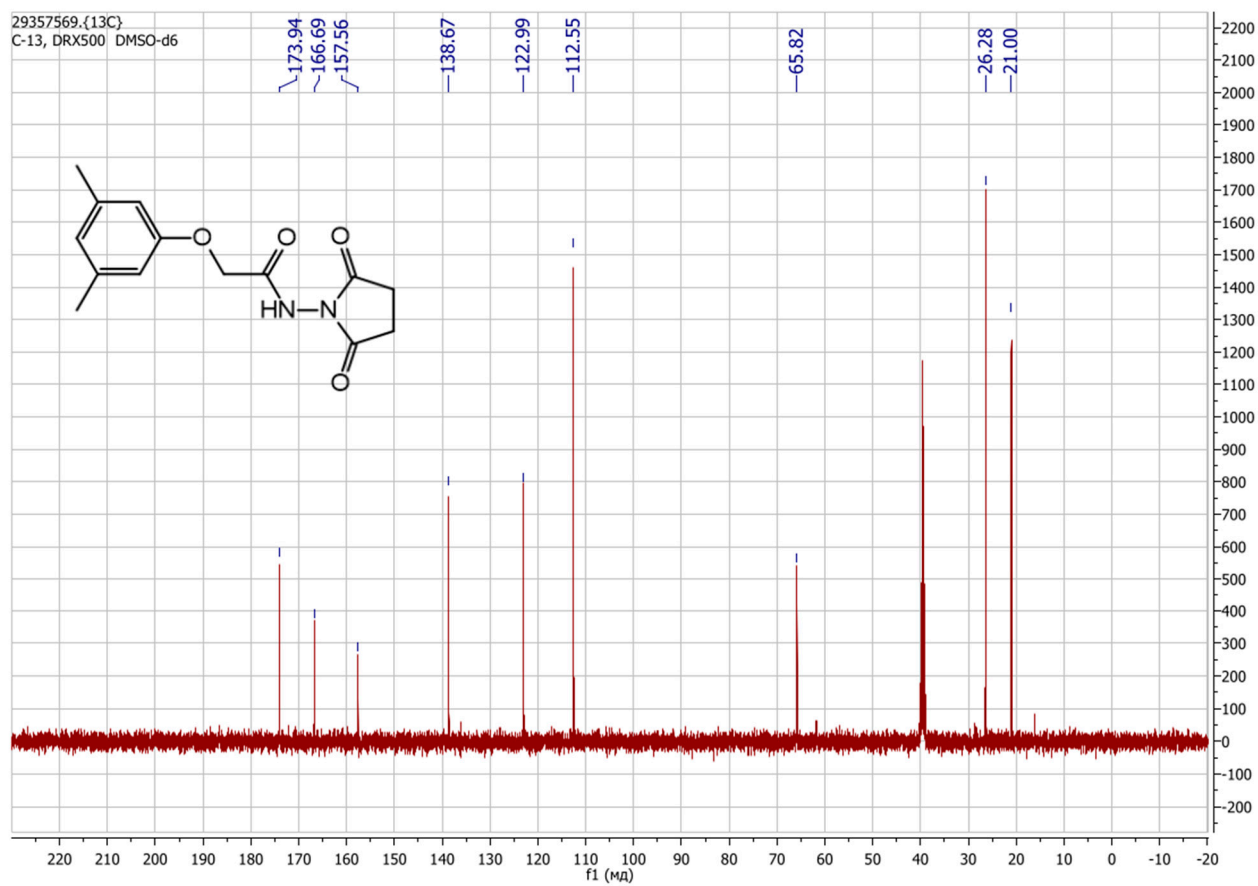
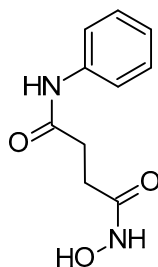


Figure S42: ¹³C NMR spectrum view of 2-(3,5-dimethylphenoxy)-*N*-(2,5-dioxopyrrolidin-1-yl)acetamide (DMSO-*d*₆) (**1p**)

***N*¹-hydroxy-*N*⁴-phenylbutanediamide (2a)**



Yield 0.61 g (73%), colorless crystals (the amount of starting *N*-substituted succinimide 0.7 g). Found, %: C 57.57; H 5.92; N 13.36; O 23.29. C₁₀H₁₂N₂O₃. Calculated, %: C 57.68; H 5.81; N 13.45; O 23.05. IR spectrum, ν , cm⁻¹: 3270, 2927, 2728, 1662, 1599, 1571, 1535, 1498, 1421, 1352, 1313, 1265, 1242, 1191, 1165, 1083, 1047, 1007, 966, 903, 844, 782, 747, 693, 656, 588, 541, 505, 465, 445, 422, 387, 372. Mass spectrum, *m/z* (Irel, %): 194 (7.6), 193 (61.5), 120 (7.5), 119 (6.6), 101 (18.5), 94 (18.5), 93 (98.5), 92 (38.5), 91 (15.4), 77 (23.7), 73 (21.5), 66 (21.5), 65 (53.8), 55 (38.5), 51 (16.9), 45 (100.0), 39 (40.0), 27 (73.1). ¹H NMR spectrum (DMSO-*d*₆), ppm (*J*, Hz): 2.28 (2H, t, *J* = 7.2, -CH₂-), 2.52 – 2.60 (2H, m, -CH₂-), 7.01 (1H, t, *J* = 7.4, H Ar), 7.27 (2H, t, *J* = 7.9, Ar-H), 7.58 (2H, d, *J* = 7.8, Ar-H), 8.74 (1H, s, N-OH), 9.95 (1H, s, N-H), 10.43 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 27.4; 31.5; 118.9; 122.9; 128.7; 139.3; 168.4; 170.2. The compound is also described in [23].

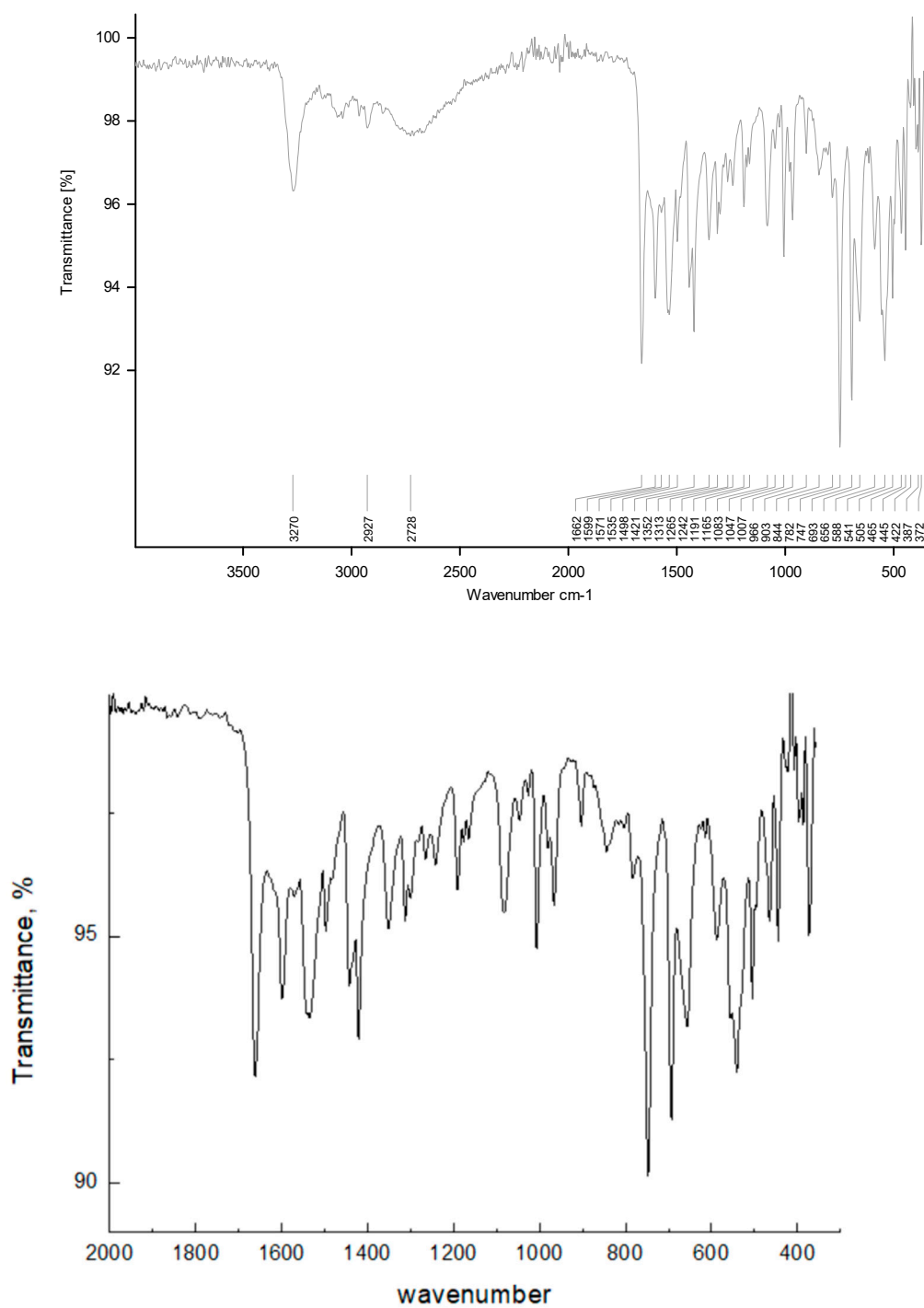


Figure S43: IR spectrum view of *N*¹-hydroxy-*N*⁴-phenylbutanediamide (**2a**)

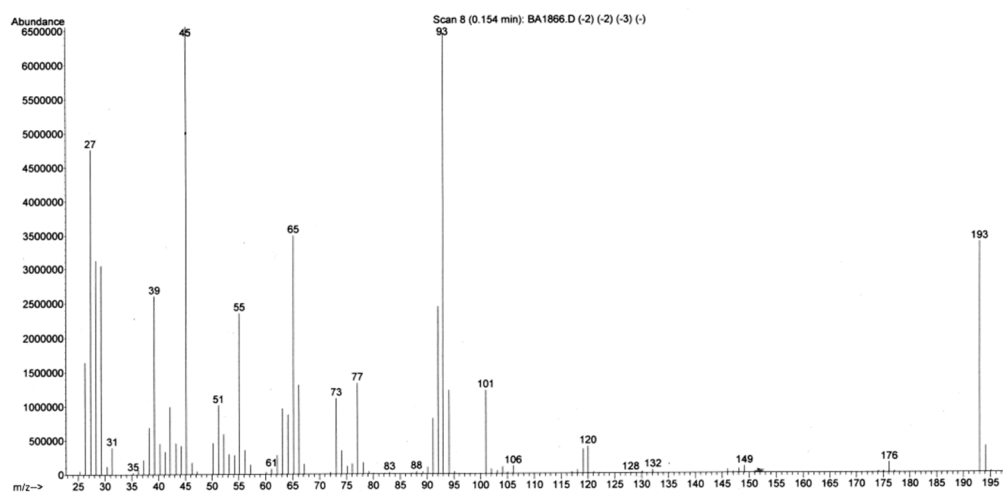


Figure S44: Mass spectrum view of *N*¹-hydroxy-*N*⁴-phenylbutanediamide (2a)

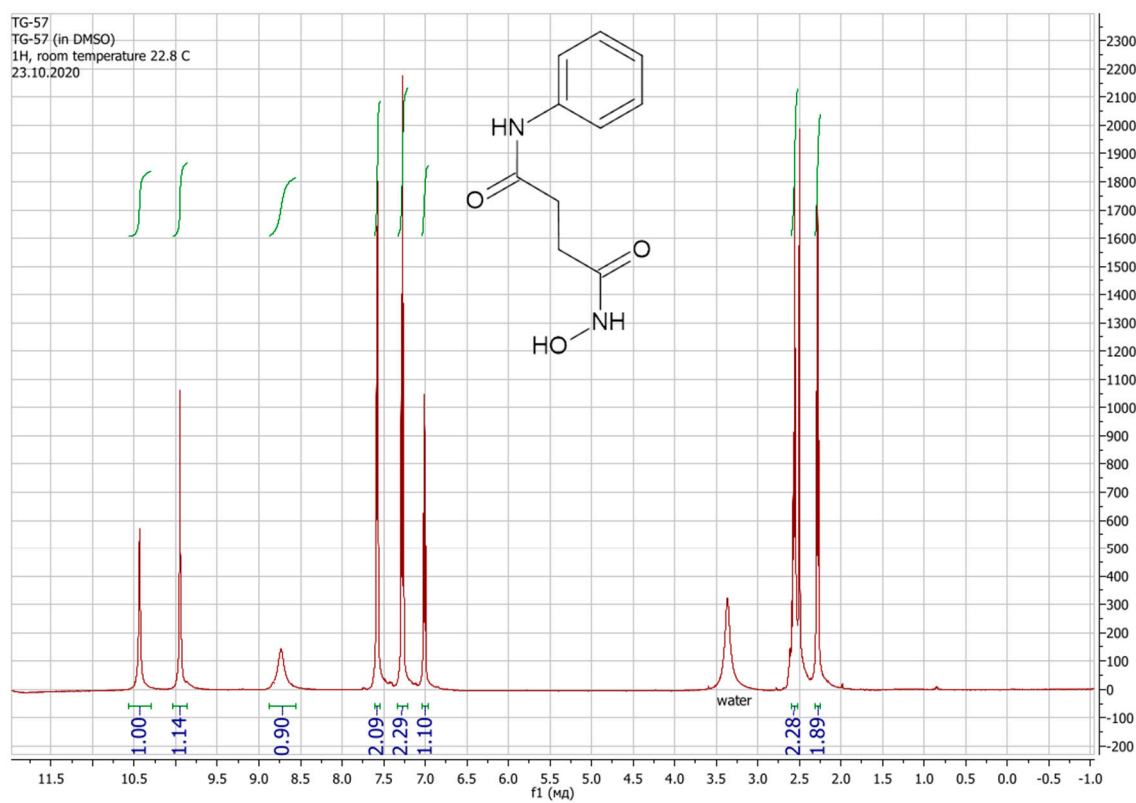


Figure S45: ¹H NMR spectrum view of *N*¹-hydroxy-*N*⁴-phenylbutanediamide (DMSO-*d*₆) (2a)

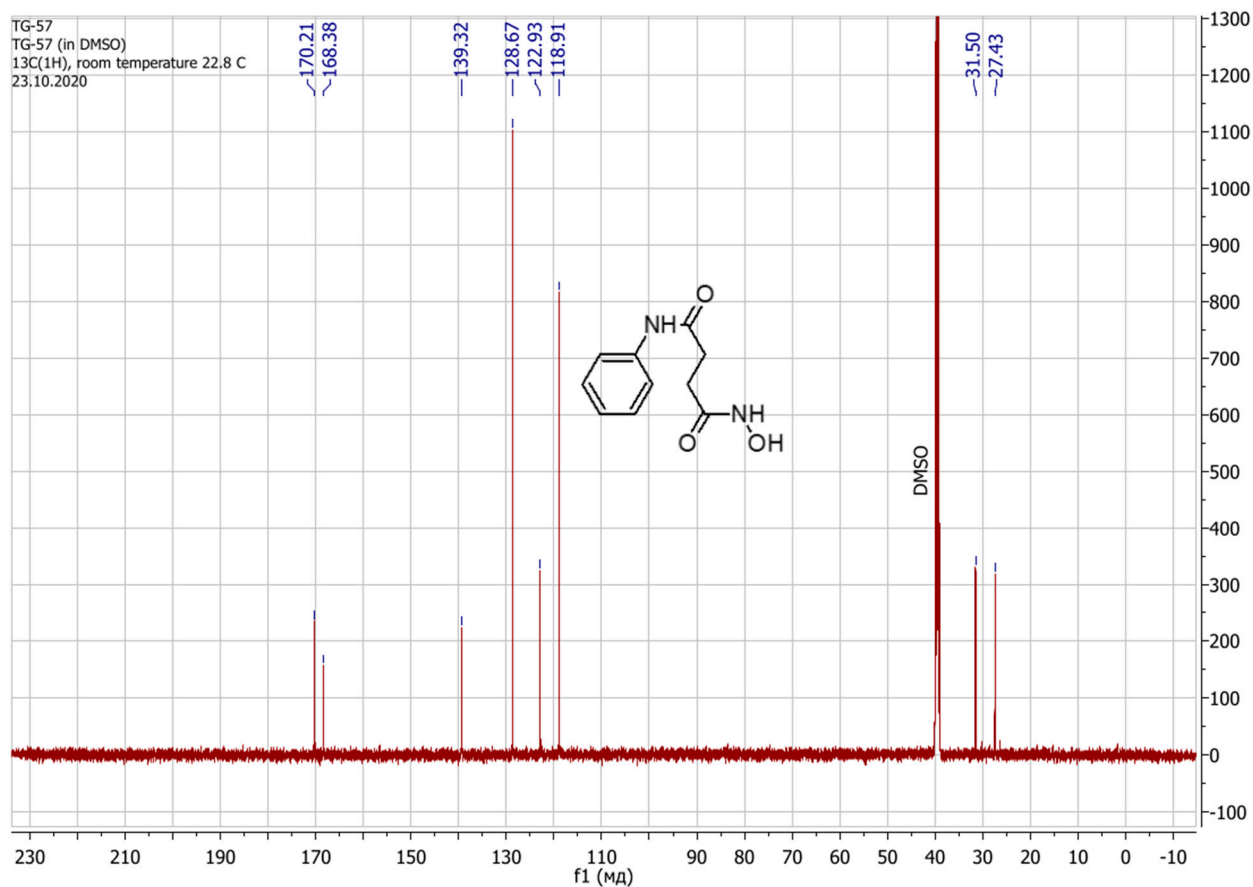
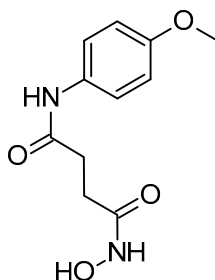


Figure S46: ^{13}C NMR spectrum view of N^1 -hydroxy- N^4 -phenylbutanediamide ($\text{DMSO}-d_6$)

(2a)

***N*¹-hydroxy-*N*⁴-(4-methoxyphenyl)butanediamide (2b)**



Yield 0.63 g (66%), colorless crystals (the amount of starting *N*-substituted succinimide 0.82 g). Found, %: C 55.51; H 5.98; N 11.89; O 26.95. C₁₁H₁₄N₂O₄. Calculated, %: C 55.46; H 5.92; N 11.76; O 26.86. IR spectrum, ν , cm⁻¹: 3260, 1656, 1604, 1539, 1512, 1423, 1409, 1354, 1248, 1086, 1029, 1007, 967, 827, 752, 683, 647, 541, 465, 448, 427, 401, 393, 376, 369. Mass spectrum, *m/z* (Irel, %): 238 [M]⁺ (23.8), 206 (18.2), 205 (4.9), 124 (9.9), 123 (100), 122 (42.8), 116 (6.2), 109 (5.1), 108 (67.3), 95 (14.0), 80 (16.8), 79 (7.2), 78 (6.4), 77 (5.5), 65 (9.4), 64 (7.9), 63 (10.0), 60 (9.4), 56 (30.4), 55 (37.8), 54 (7.3), 53 (19.3), 52 (25.0), 51 (9.1), 44 (25.4), 43 (9.9), 42 (21.6), 41 (13.3), 39 (40.0), 33 (11.1), 31 (8.7), 30 (10.2), 29 (36.2), 28 (32.5), 27 (49.5), 26 (16.7), 15 (44.7). ¹H NMR spectrum (DMSO-*d*₆), ppm (*J*, Hz): 2.27 (2H, t, *J* = 7.3, -CH₂-), 2.50 – 2.55 (2H, m, -CH₂-), 3.70 (3H, s, -CH₃), 6.85 (2H, d, *J* = 9.0, Ar-H), 7.49 (2H, d, *J* = 8.9, Ar-H), 8.71 (1H, s, N-OH), 9.82 (1H, s, N-H), 10.49 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 28.0; 29.0; 66.4; 115.2; 121.7; 130.0; 158.2; 167.1; 168.6; 170.7.

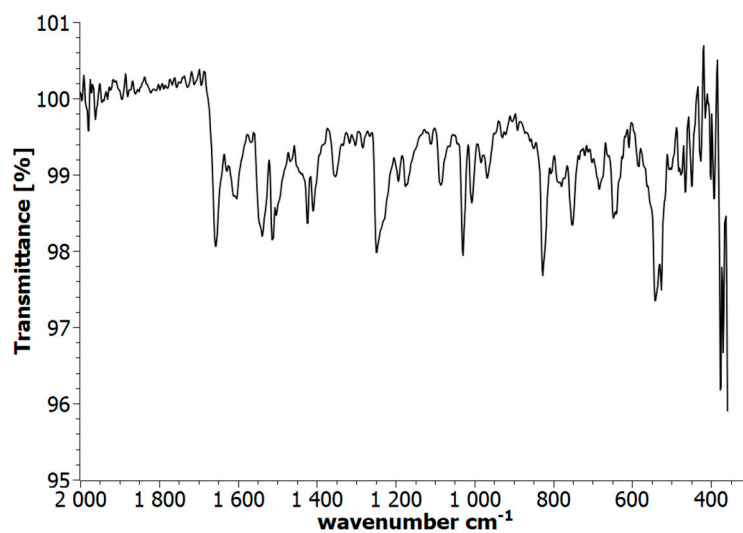
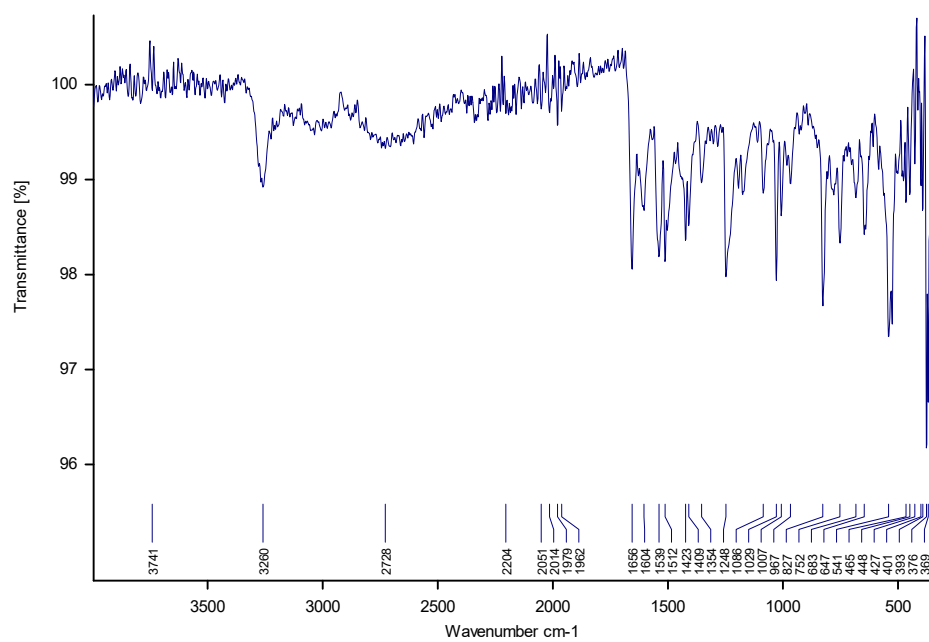


Figure S47: IR spectrum view of *N*¹-hydroxy-*N*⁴-(4-methoxyphenyl)butanediamide (**2b**)

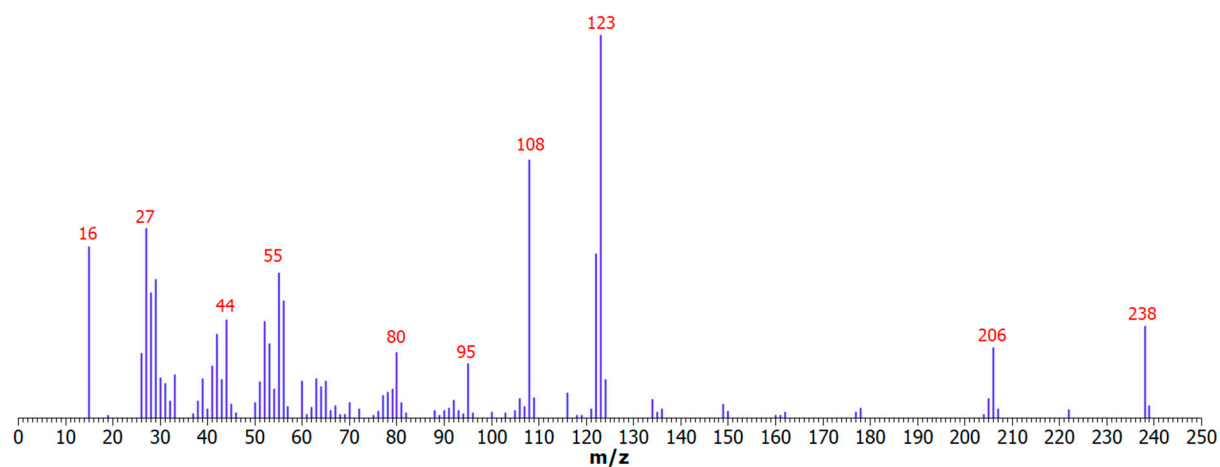


Figure S48: Mass spectrum view of *N*¹-hydroxy-*N*⁴-(4-methoxyphenyl)butanediamide (**2b**)

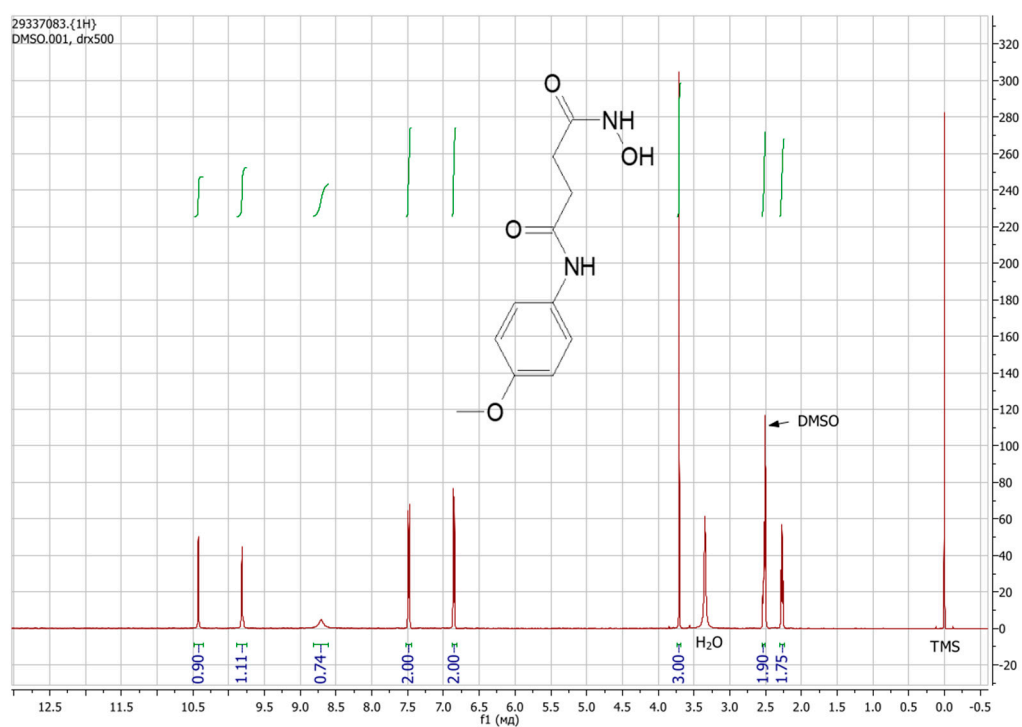


Figure S49: ¹H NMR spectrum view of of *N*¹-hydroxy-*N*⁴-(4-methoxyphenyl)butanediamide (DMSO-*d*₆) (**2b**)

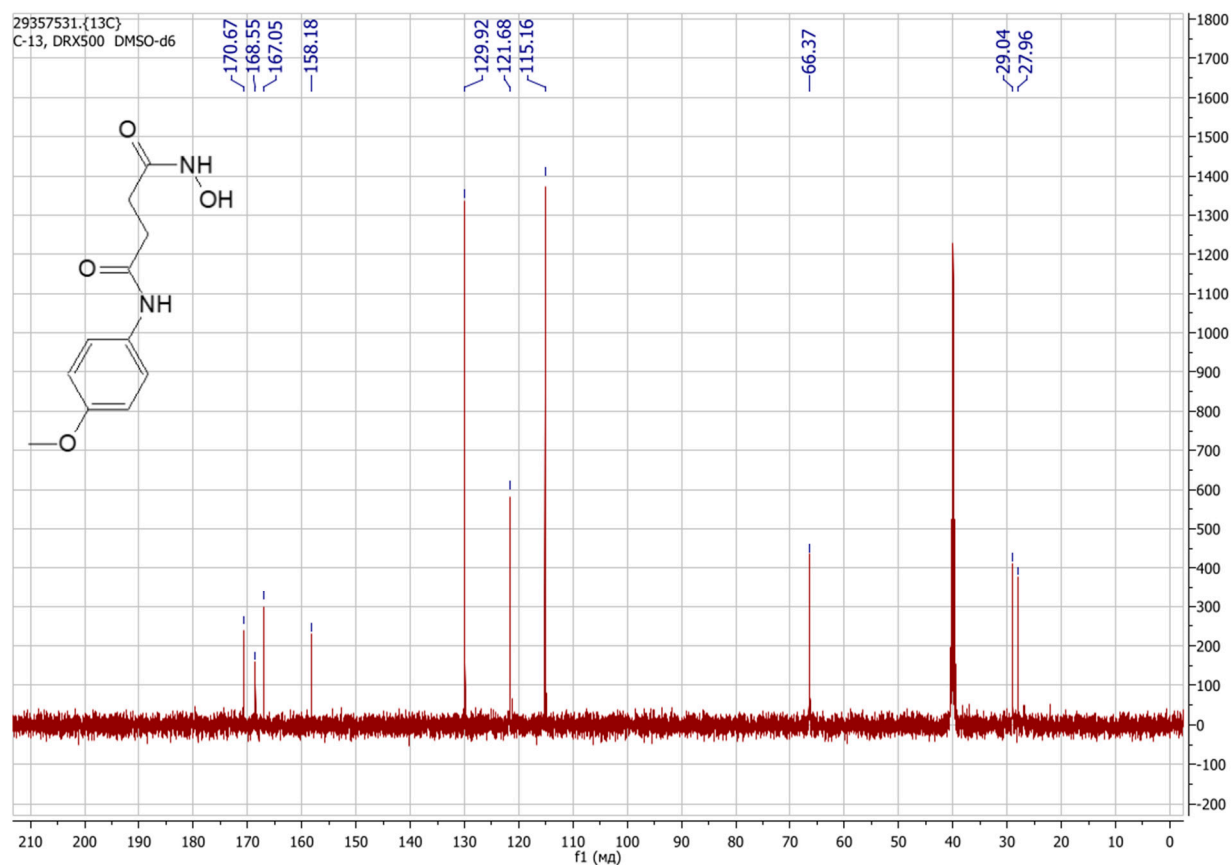
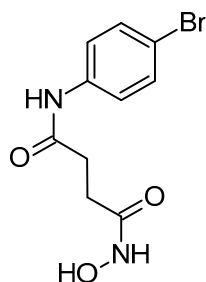


Figure S50: ¹³C NMR spectrum view of of *N*¹-hydroxy-*N*⁴-(4-methoxyphenyl)butanediamide (DMSO-*d*₆) (**2b**)

***N*¹-(4-bromophenyl)-*N*⁴-hydroxybutanediamide (2c)**



Yield 0.61 g (53%), colorless crystals (the amount of starting *N*-substituted succinimide 1.01 g). Found, %: C 41.78; H 4.01; N 9.52; O 16.89. C₁₀H₁₁BrN₂O₃. Calculated, %: C 41.83; H 3.86; Br 27.83; N 9.76; O 16.72. IR spectrum, ν , cm⁻¹: 3257, 2685, 1654, 1588, 1532, 1486, 1418, 1394, 1350, 1299, 1241, 1189, 1073, 1007, 969, 708, 665, 611, 548, 504, 470, 453, 392, 378. ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.28 (2H, t, *J* = 7.2, -CH₂-), 2.56 (2H, t, *J* = 7.2, -CH₂-), 7.43 (2H, d, *J* = 8.8, Ar-H), 7.58 (2H, d, *J* = 8.8, Ar-H), 8.5 – 10.0 (broad peak, -OH), 10.26 (1H, s, N-H), 10.51 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 27.4; 31.6; 114.5; 120.9; 131.5; 138.8; 168.5; 170.6.

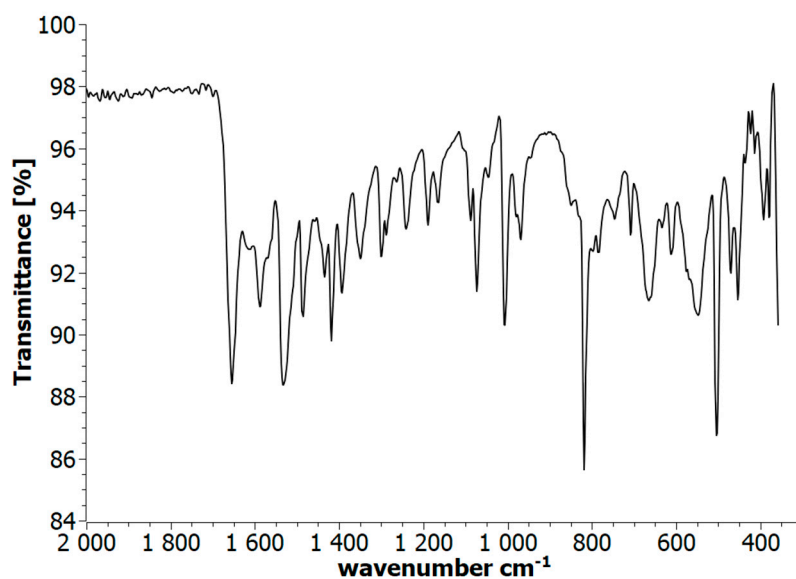
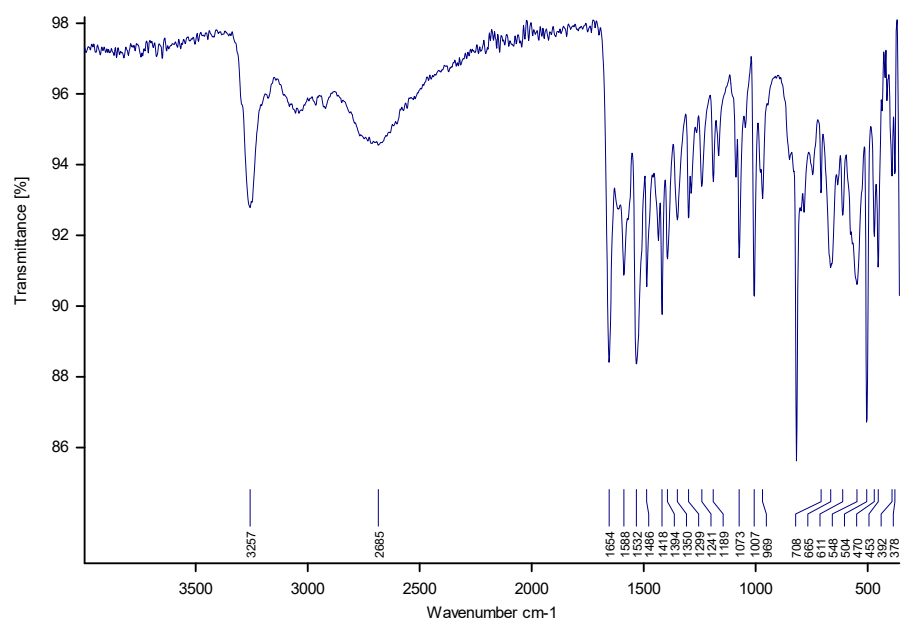


Figure S51: IR spectrum view of *N*¹-(4-bromophenyl)-*N*⁴-hydroxybutanediamide (**2c**)

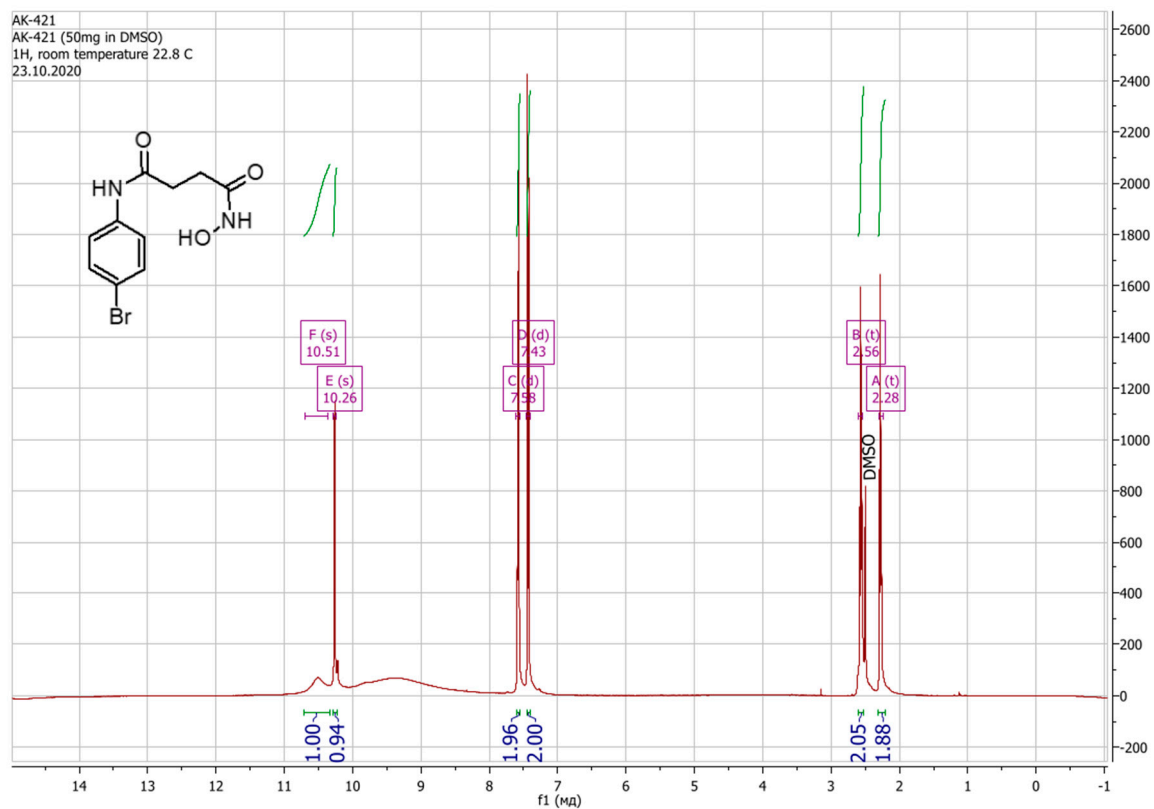


Figure S52: ¹H NMR spectrum view of *N*¹-(4-bromophenyl)-*N*⁴-hydroxybutanediamide (DMSO-*d*₆) (2c)

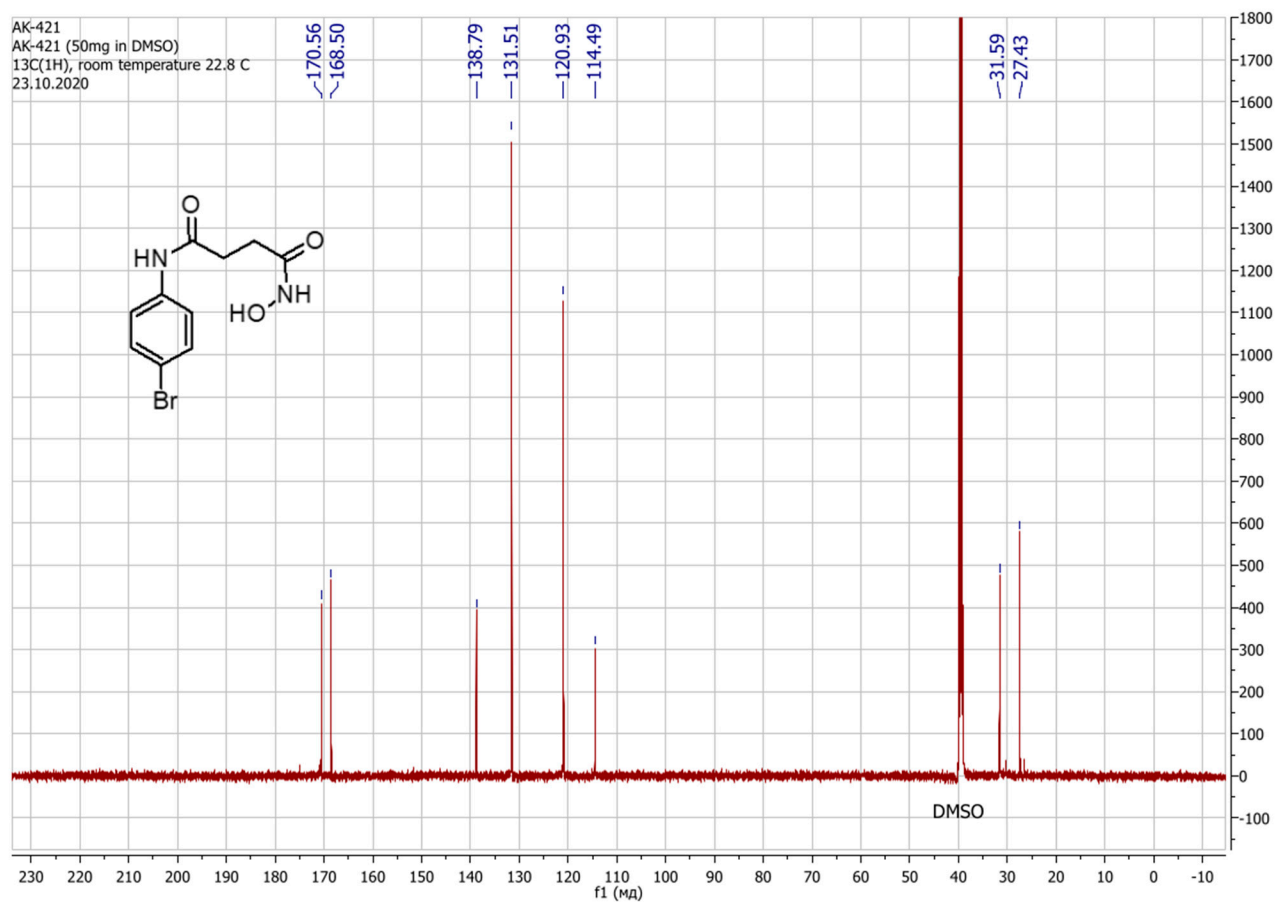
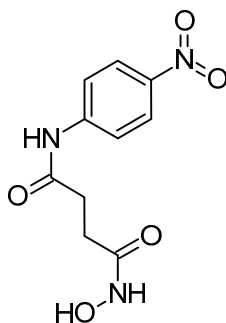


Figure S53: ^{13}C NMR spectrum view of *N*¹-(4-bromophenyl)-*N*⁴-hydroxybutanediamide (DMSO-*d*₆) (**2c**)

***N*¹-hydroxy-*N*⁴-(4-nitrophenyl)butanediamide (2d)**



Yield 0.65 g (64%), colorless crystals (the amount of starting *N*-substituted succinimide 0.88 g). Found, %: C 47.41; H 4.25; N 16.37; O 31.36. C₁₀H₁₁N₃O₅. Calculated, %: C 47.43; H 4.38; N 16.59; O 31.59. IR spectrum, ν , cm⁻¹: 3680, 2972, 1664, 1614, 1597, 1558, 1521, 1495, 1455, 1412, 1340, 1259, 1179, 1113, 1055, 1033, 1013, 853, 774, 751, 690, 642, 531, 494, 408, 375. ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.31 (2H, t, *J* = 7.0, -CH₂-), 2.64 (2H, t, *J* = 7.0, -CH₂-), 7.82 (2H, d, *J* = 9.1, Ar-H), 8.20 (2H, d, *J* = 9.2, Ar-H), 8.74 (1H, s, -OH), 10.46 (1H, s, N-H), 10.59 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 27.1; 31.6; 118.5; 125.0; 142.0; 145.4; 168.2; 171.4.

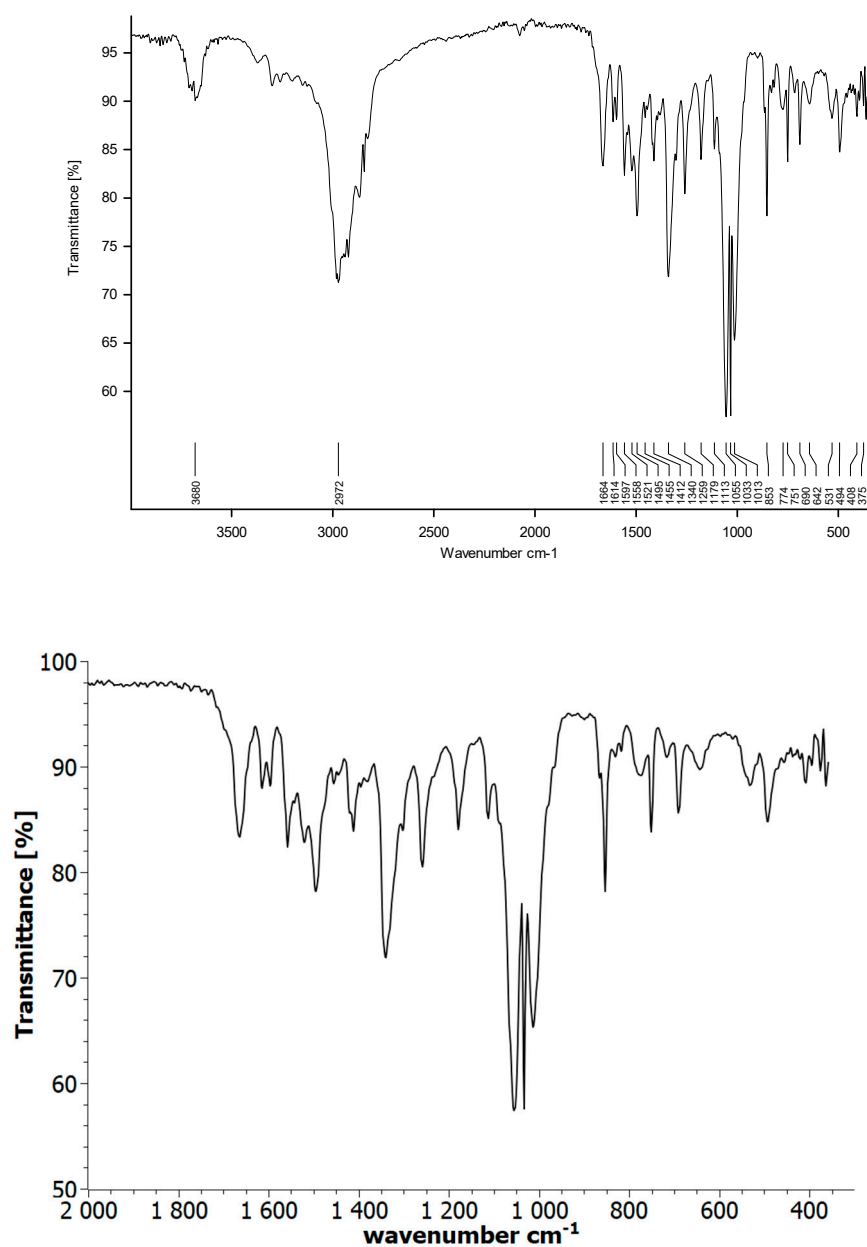


Figure S54: IR spectrum view of *N*¹-hydroxy-*N*⁴-(4-nitrophenyl)butanediamide (**2d**)

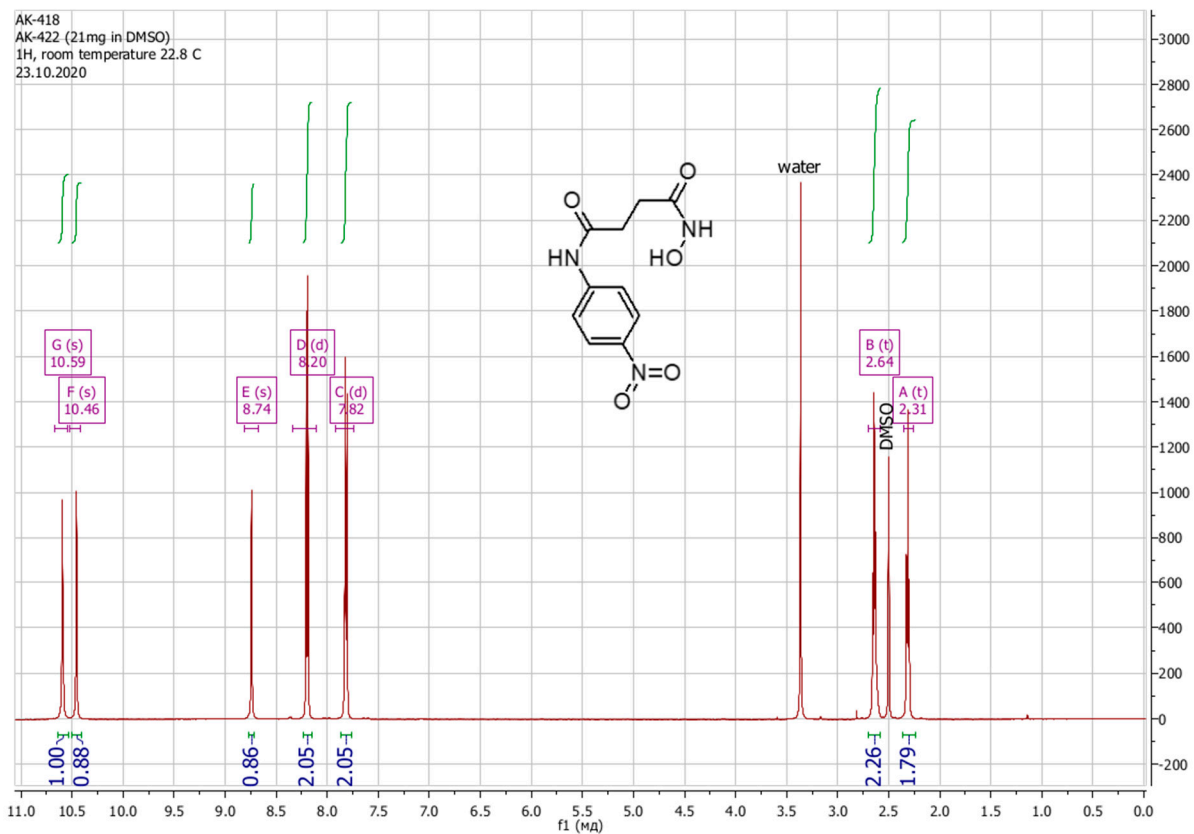


Figure S55: ^1H NMR spectrum view of N^1 -hydroxy- N^4 -(4-nitrophenyl)butanediamide (DMSO- d_6) (**2d**)

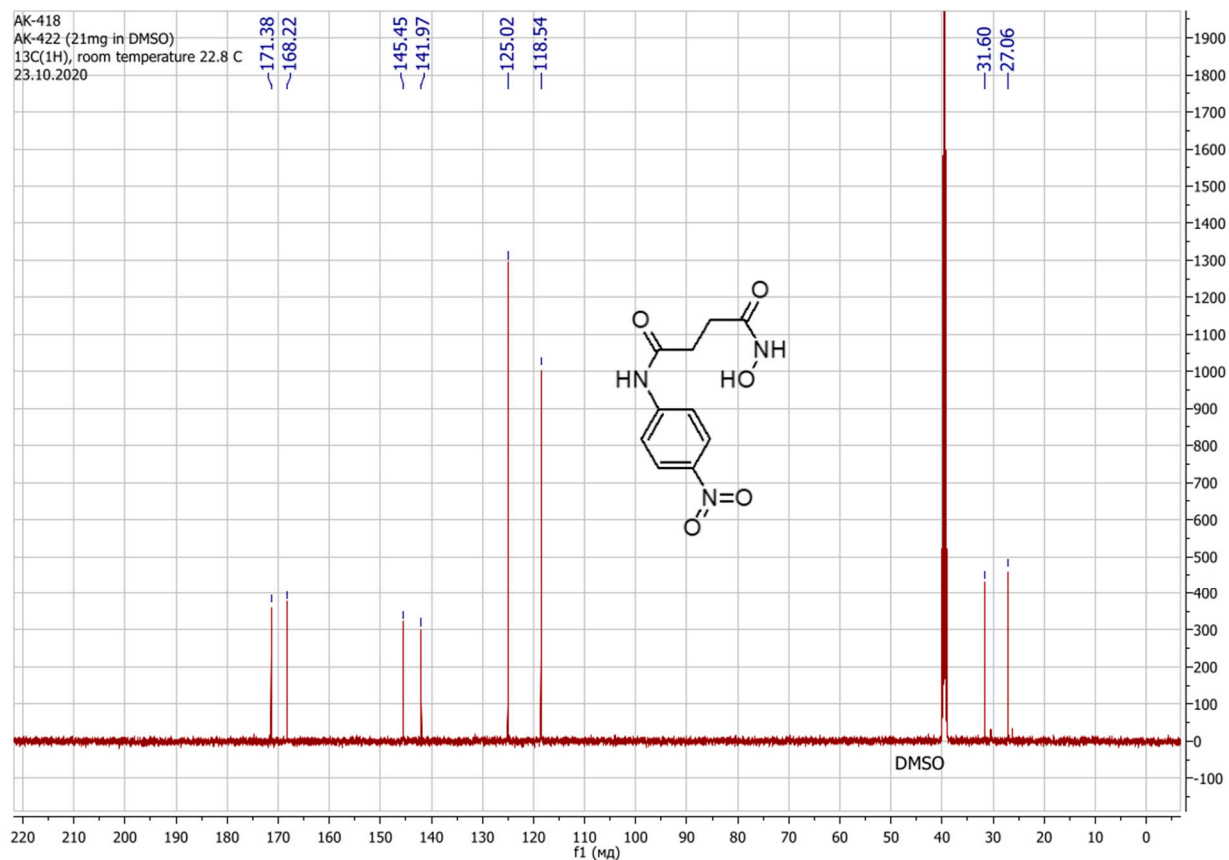
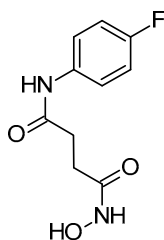


Figure S56: ¹³C NMR spectrum view of *N*¹-hydroxy-*N*⁴-(4-nitrophenyl)butanediamide (DMSO-*d*₆) (**2d**)

***N*¹-(4-fluorophenyl)-*N*⁴-hydroxybutanediamide (2e)**



Yield 0.35 g (38%), colorless crystals (the amount of starting *N*-substituted succinimide 0.77 g). Found, %: C 53.16; H 4.99; N 12.52; O 21.31. C₁₀H₁₁FN₂O₃. Calculated, %: C 53.10; H 4.90; F 8.40; N 12.38; O 21.22. IR spectrum, ν , cm⁻¹: 3272, 2988, 1658, 1613, 1539, 1510, 1423, 1407, 1342, 1307, 1217, 1084, 1008, 983, 965, 832, 782, 706, 647, 514, 454. Mass spectrum, *m/z* (Irel, %): 226 [M]⁺ (10.9), 195 (4.3), 194 (36.8), 193 (5.2), 138 (9.5), 116 (8.7), 112 (8.9), 111 (100), 110 (22.0), 109 (5.9), 95 (6.7), 84 (5.9), 83 (21.6), 82 (5.2), 57 (11.2), 56 (10.3), 55 (21.9), 44 (10.5), 42 (6.6), 29 (6.2), 28 (11.5), 27 (17.3), 26 (5.8). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.28 (2H, t, *J* = 7.2, -CH₂-), 2.55 (2H, t, *J* = 7.2, -CH₂-), 5.80 – 8.10 (2H, broad peak, -OH, N-H), 7.12 (2H, t, *J* = 8.8, Ar-H), 7.59 (2H, dd, *J*₁ = 8.7, *J*₂ = 5.1, Ar-H), 10.03 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 27.9; 31.9; 115.6 (d, *J* = 22.1); 121.1 (d, *J* = 7.7); 136.2; 158.2 (d, *J* = 239.5); 168.8; 170.6.

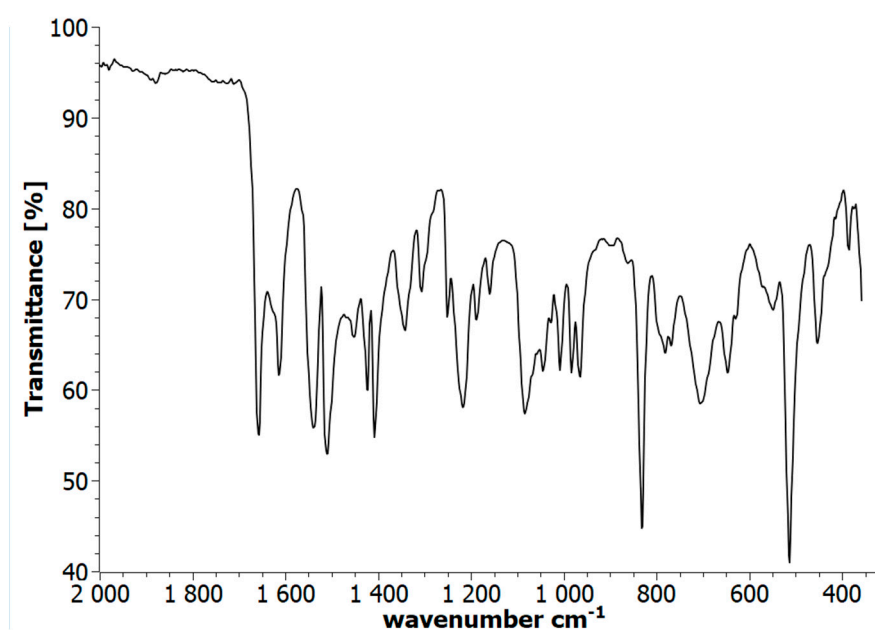
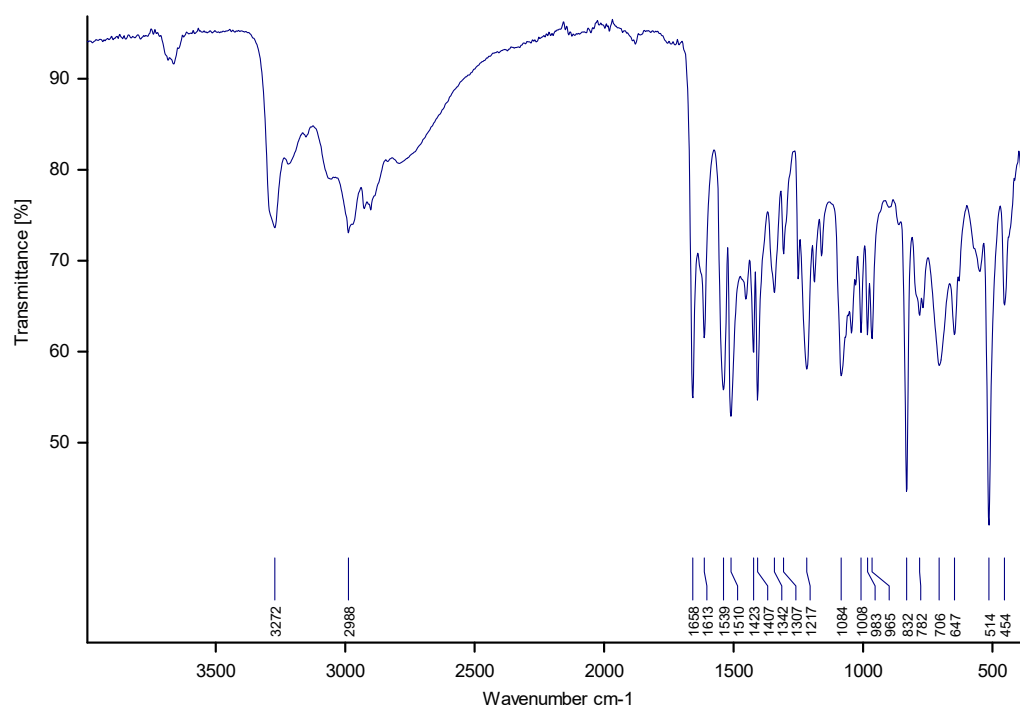


Figure S57: IR spectrum view of *N*¹-(4-fluorophenyl)-*N*⁴-hydroxybutanediamide (**2e**)

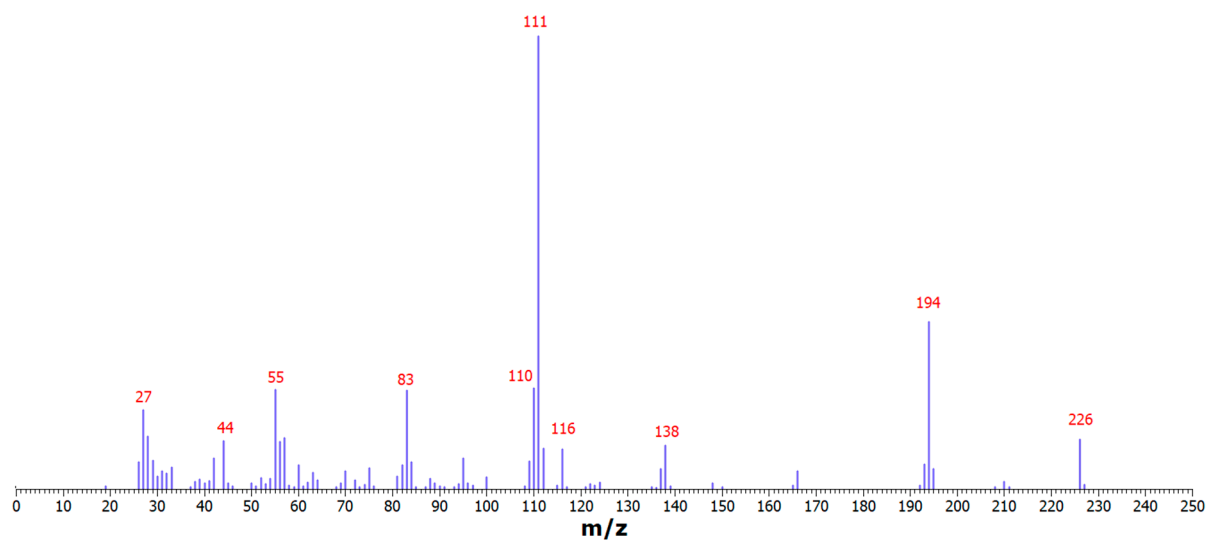


Figure S58: Mass spectrum view of *N*¹-(4-fluorophenyl)-*N*⁴-hydroxybutanediamide (**2e**)

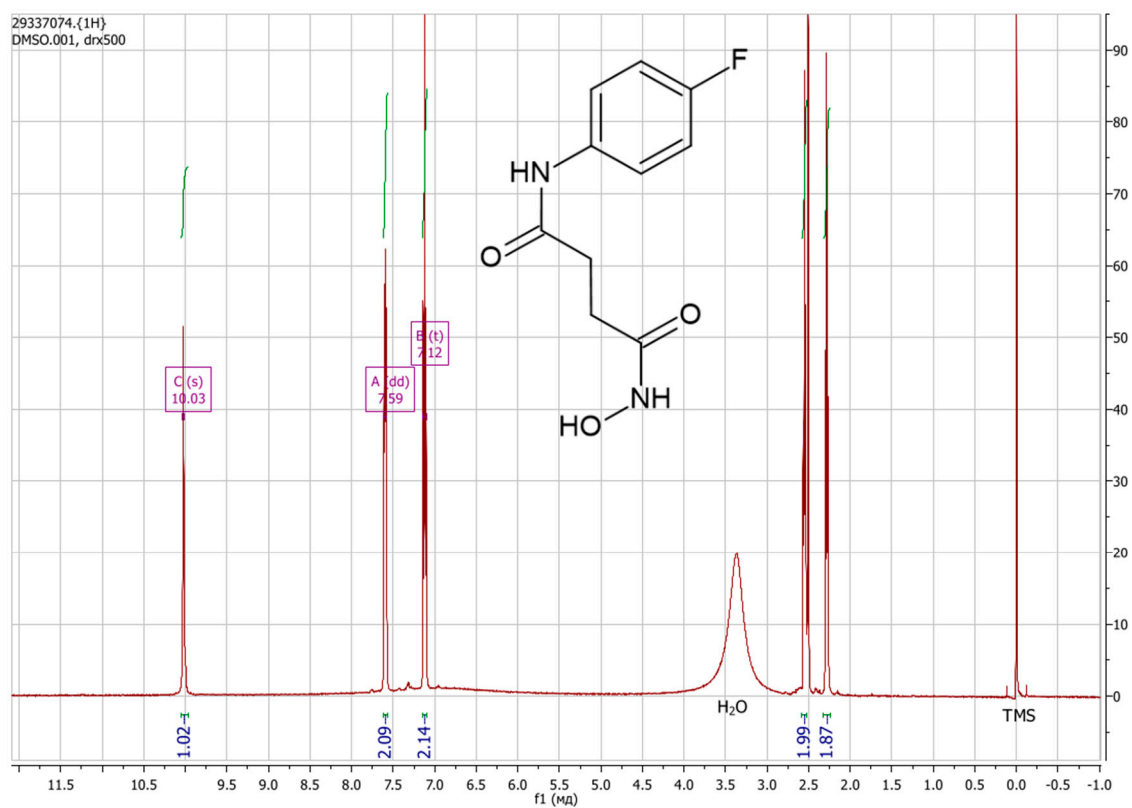


Figure S59: ¹H NMR spectrum view of *N*¹-(4-fluorophenyl)-*N*⁴-hydroxybutanediamide (DMSO-*d*₆) (**2e**)

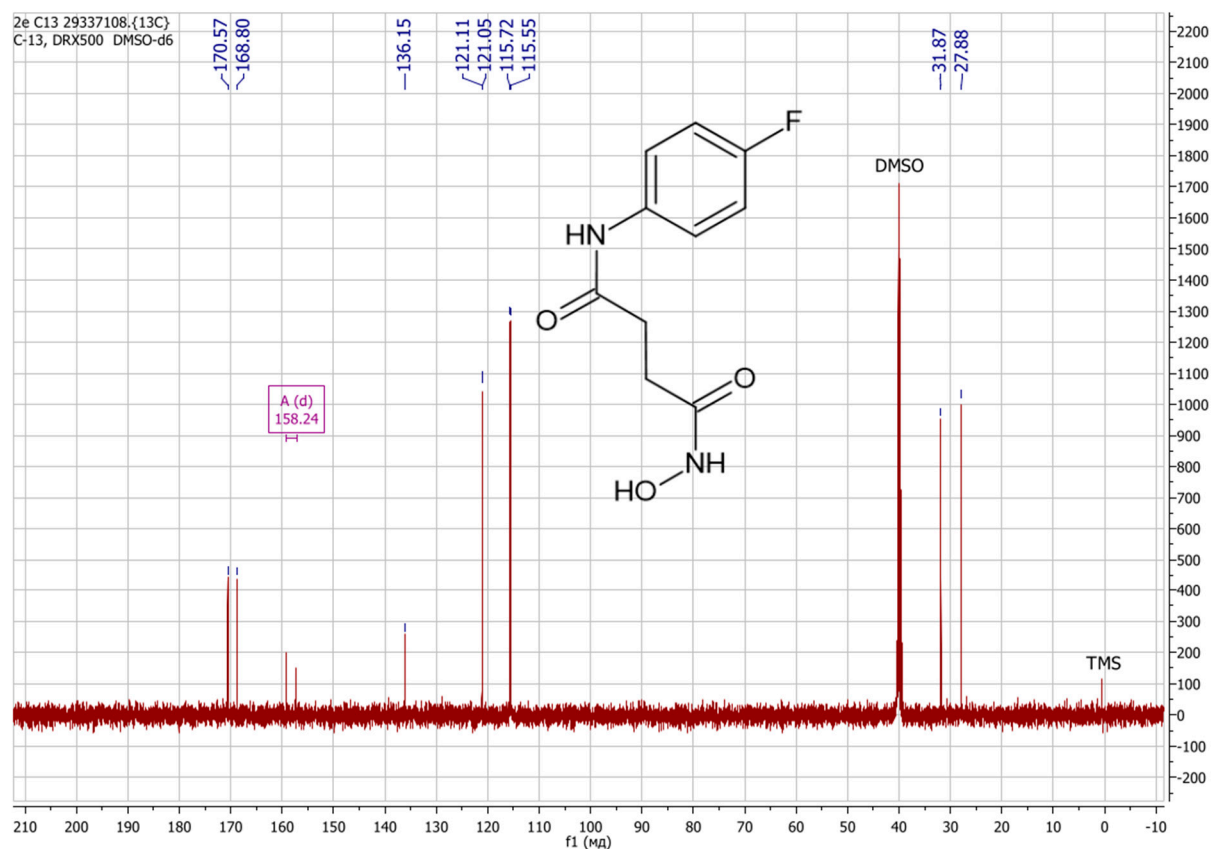
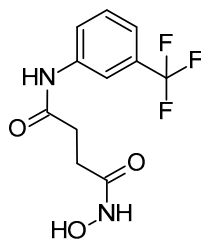


Figure S60: ^{13}C NMR spectrum view of N^1 -(4-fluorophenyl)- N^4 -hydroxybutanediamide (DMSO- d_6) (**2e**)

***N*¹-hydroxy-*N*⁴-[3-(trifluoromethyl)phenyl]butanediamide (2f)**



Yield 0.38 g (34%), colorless crystals (the amount of starting *N*-substituted succinimide 0.97 g). Found, %: C 47.91; H 4.12; N 10.31; O 17.52. C₁₁H₁₁F₃N₂O₃. Calculated, %: C 47.83; H 4.01; F 20.63; N 10.14; O 17.38. IR spectrum, ν , cm⁻¹: 3262, 2970, 1675, 1624, 1570, 1523, 1486, 1451, 1333, 1284, 1261, 1179, 1138, 1102, 1071, 1026, 966, 898, 800, 698, 664, 545, 451. Mass spectrum, *m/z* (Irel, %): 276 [M]⁺ (6.5), 255 (37.0), 224 (7.4), 188 (13.3), 161 (100), 160 (15.6), 145 (17.6), 142 (6.4), 140 (8.8), 116 (18.3), 114 (11.5), 113 (8.8), 100 (9.6), 91 (5.6), 88 (9.1), 83 (5.8), 75 (8.0), 69 (23.8), 63 (15.3), 60 (14.2), 57 (7.9), 56 (25.6), 55 (77.2), 54 (8.4), 52 (5.8), 45 (6.3), 44 (39.2), 43 (15.5), 42 (33.2), 33 (22.9), 32 (25.0), 31 (11.0), 30 (14.8), 29 (39.5), 28 (82.3), 27 (73.1), 26 (22.9). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.30 (2H, t, *J* = 7.1, -CH₂-), 2.60 (2H, t, *J* = 7.1, -CH₂-), 7.37 (1H, d, *J* = 7.6, Ar-H), 7.53 (1H, t, *J* = 7.9, Ar-H), 7.74 (1H, d, *J* = 8.2, Ar-H), 8.11 (1H, s, Ar-H), 8.72 (1H, s, -OH), 10.31 (1H, s, N-H), 10.44 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 27.2; 31.4; 114.9; 119.2; 122.3; 123.0; 124.1 (q, *J* = 272.0); 125.2; 129.4 (q, *J* = 31.5), 129.8; 139.9; 168.2; 170.8.

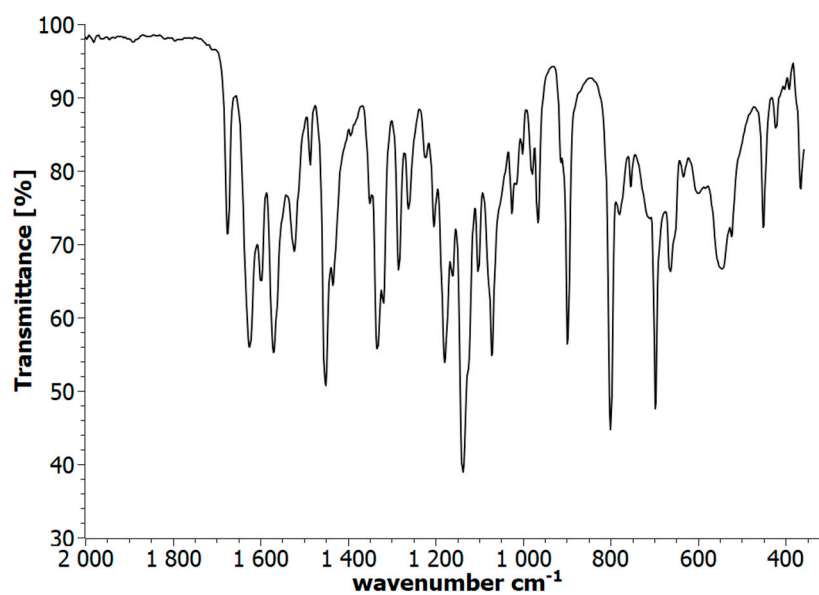
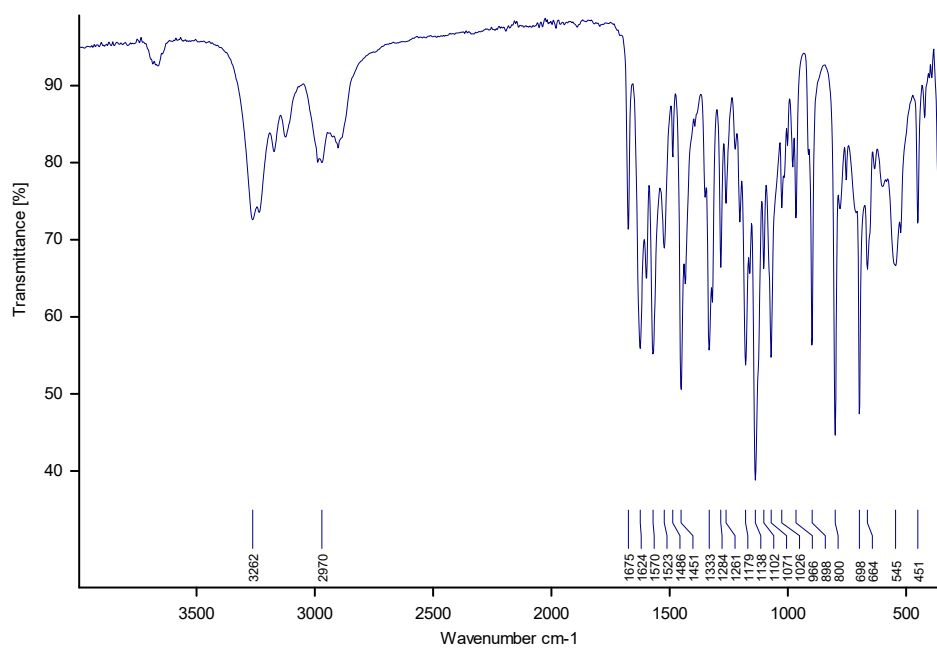


Figure S61: IR spectrum view of N^1 -hydroxy- N^4 -[3-(trifluoromethyl)phenyl]butanediamide (**2f**)

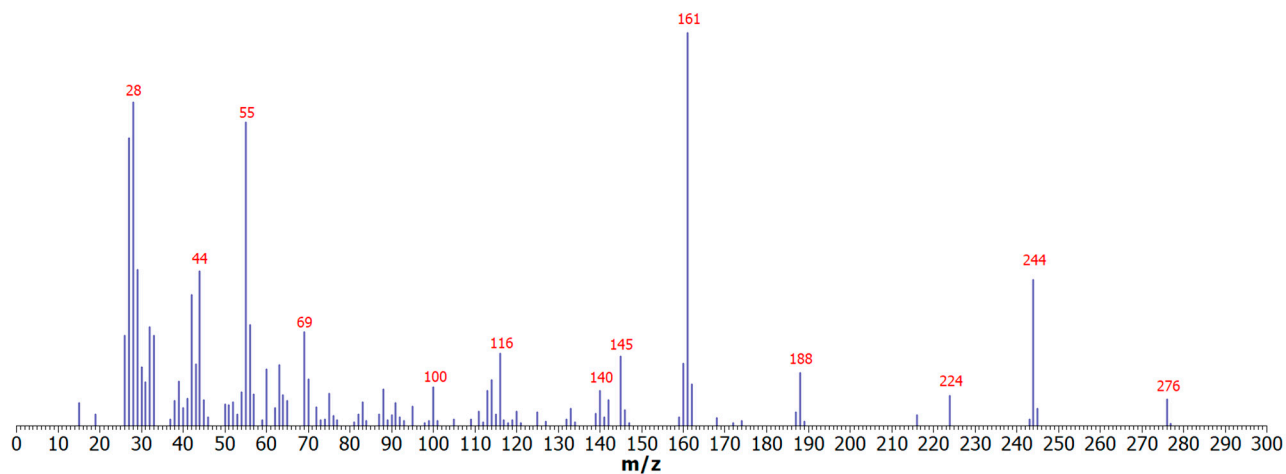


Figure S62: Mass spectrum view of N^1 -hydroxy- N^4 -[3-(trifluoromethyl)phenyl]butanediamide (**2f**)

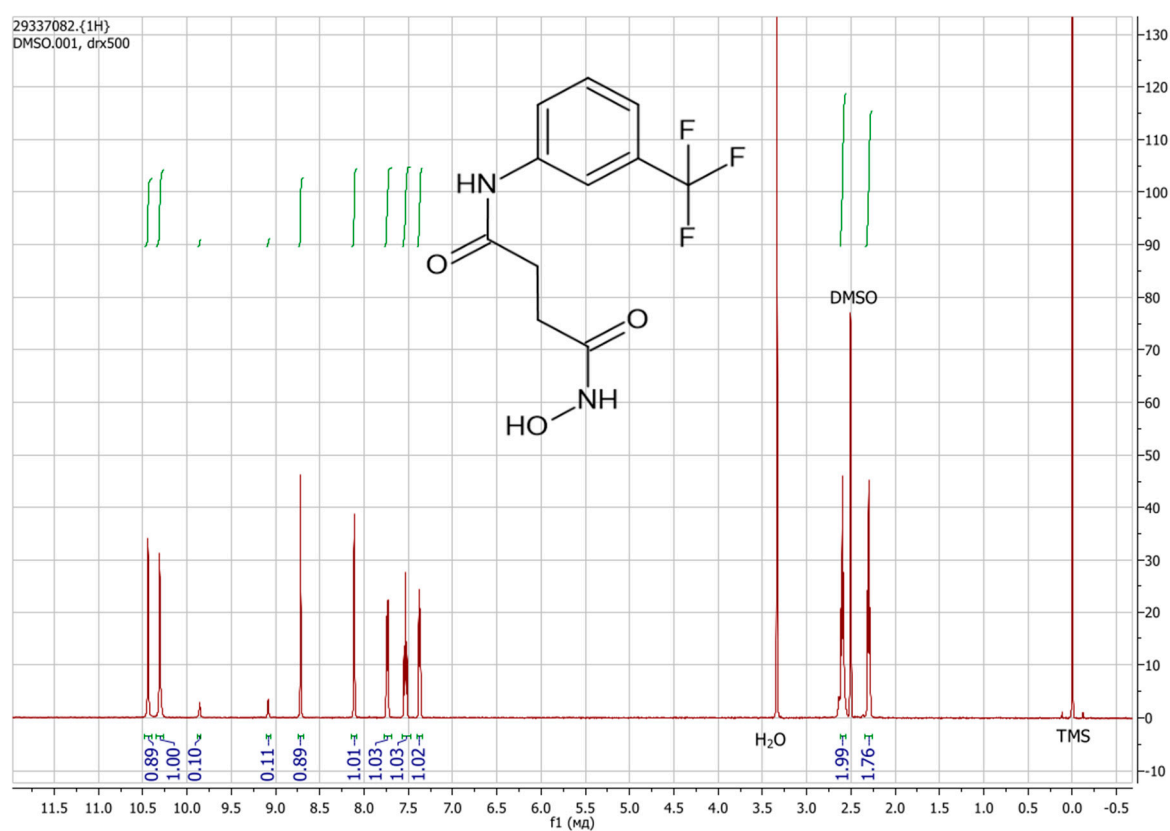


Figure S63: ^1H NMR spectrum view of N^1 -hydroxy- N^4 -[3-(trifluoromethyl)phenyl]butanediamide ($\text{DMSO-}d_6$) (**2f**) (the additional signals are related to *cis-trans* isomerisation [24])

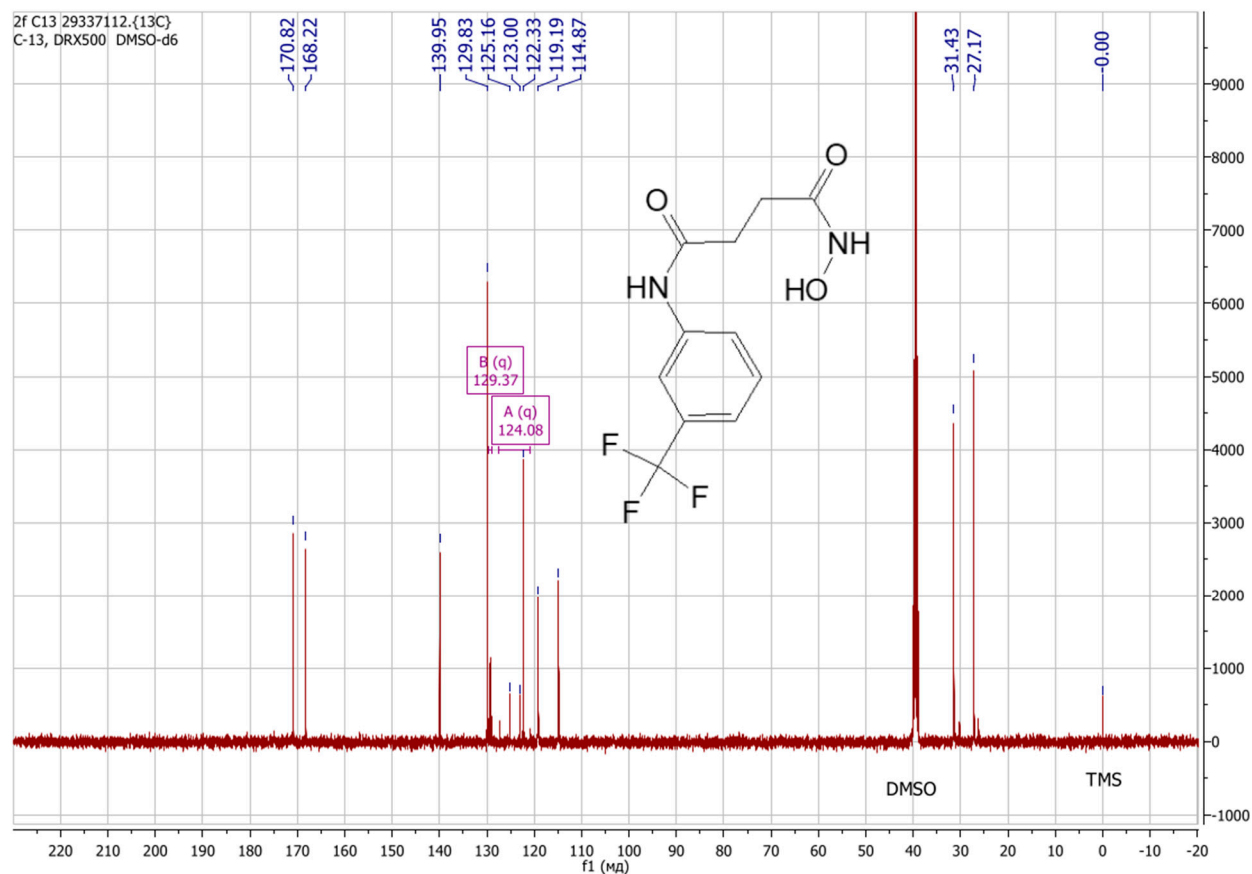
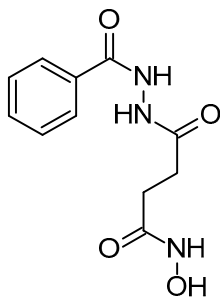


Figure S64: ^{13}C NMR spectrum view of *N*¹-hydroxy-*N*⁴-[3-(trifluoromethyl)phenyl]butanediamide (DMSO-*d*₆) (2f)

4-(2-benzoylhydrazinyl)-N-hydroxy-4-oxobutanamide (2g)



Yield 0.76 g (75%), colorless crystals (the amount of starting *N*-substituted succinimide 0.87 g). Found, %: C 52.48; H 5.34; N 16.58; O 25.59. $C_{11}H_{13}N_3O_4$. Calculated, %: C 52.59; H 5.22; N 16.73; O 25.47. IR spectrum, ν , cm^{-1} : 3677, 3233, 2988, 2901, 1685, 1629, 1564, 1524, 1487, 1417, 1330, 1271, 1231, 1162, 1066, 997, 898, 809, 718, 694, 605, 556, 547, 527, 422, 395, 370. ^1H NMR spectrum ($\text{DMSO}-d_6$), δ , ppm (J , Hz): 2.15 – 2.30 (2H, m, $-\text{CH}_2-$), 2.40 – 2.48 (2H, m, $-\text{CH}_2-$), 7.44 – 7.52 (2H, m, Ar-H), 7.53 – 7.61 (1H, m, Ar-H), 7.84 – 7.90 (2H, m, Ar-H), 8.76 (1H, s, O-H), 9.80 – 10.02 (1H, m, N-H), 10.33 (1H, s, N-H), 10.50 (1H, s, N-H). ^{13}C NMR spectrum ($\text{DMSO}-d_6$), δ , ppm: 27.7; 28.8; 127.5; 128.5; 131.9; 132.6; 165.6; 168.3; 170.8.

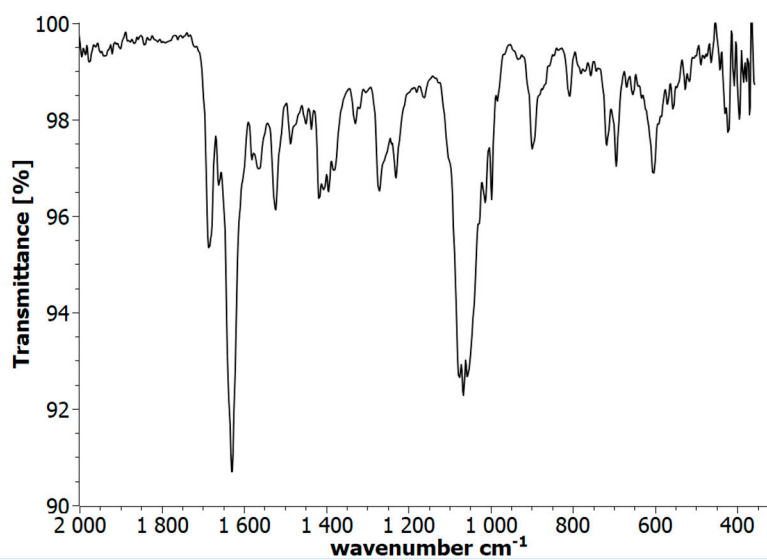
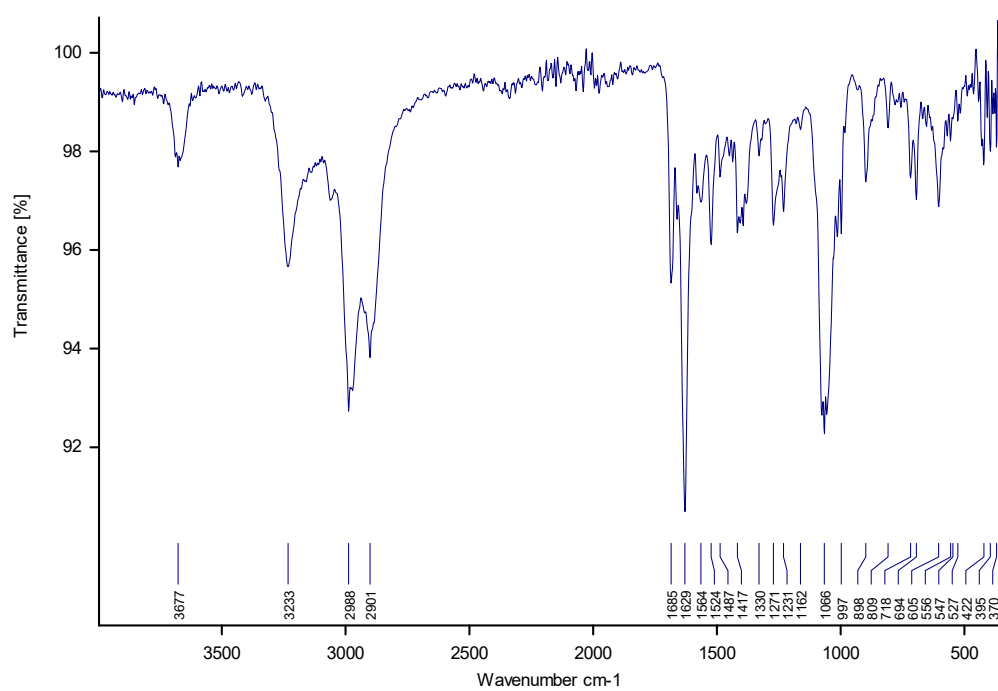


Figure S65: IR spectrum view of 4-(2-benzoylhydrazinyl)-*N*-hydroxy-4-oxobutanamide (2g)

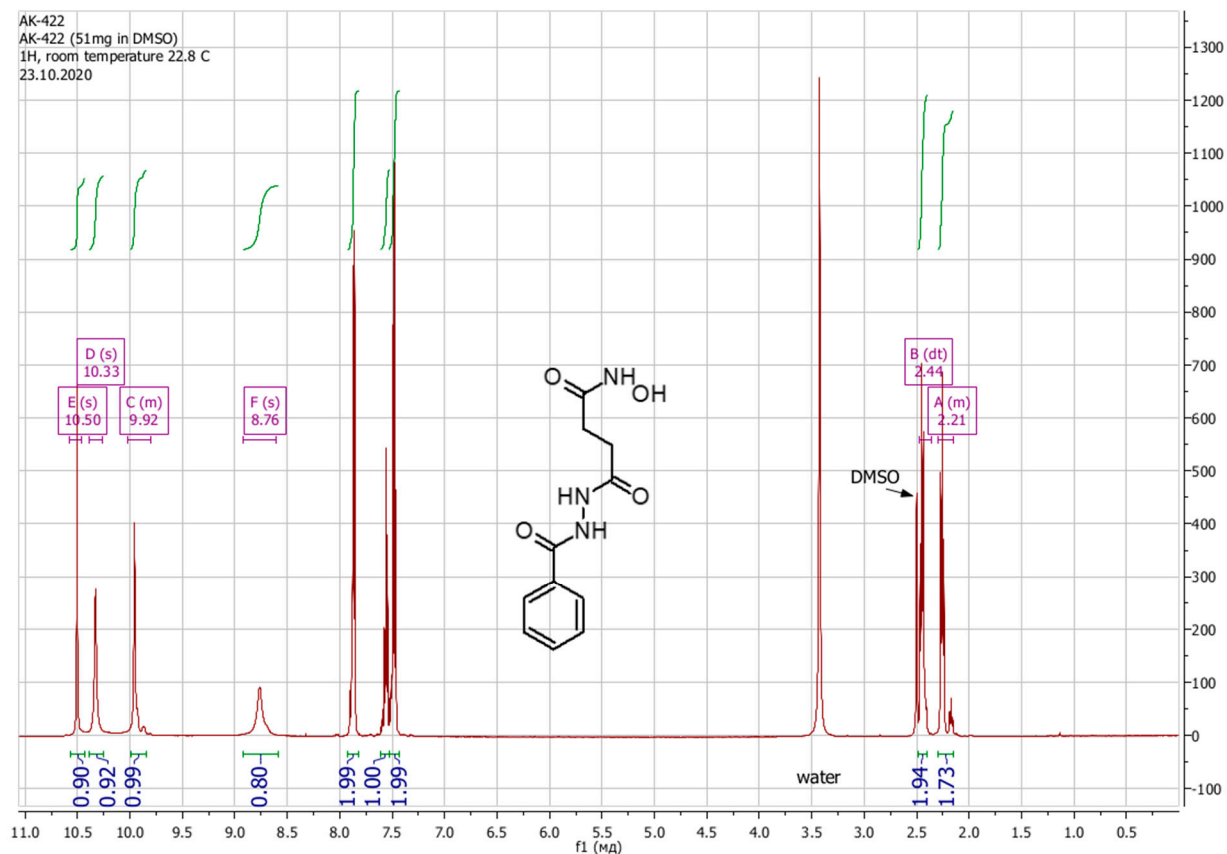


Figure S66: ^1H NMR spectrum view of 4-(2-benzoylhydrazinyl)-N-hydroxy-4-oxobutanamide ($\text{DMSO-}d_6$) (**2g**) (the additional signals are related to *cis-trans* isomerisation [24])

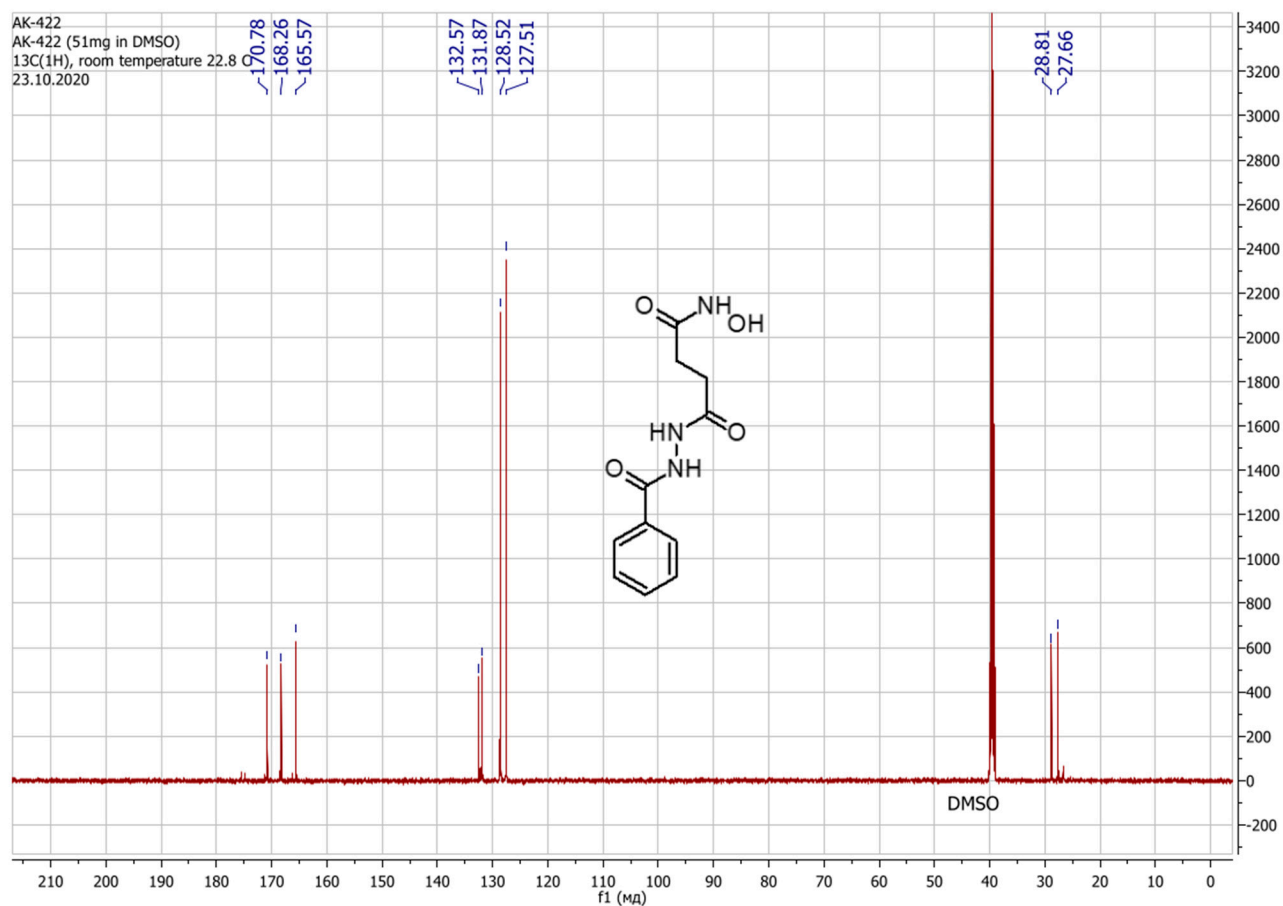
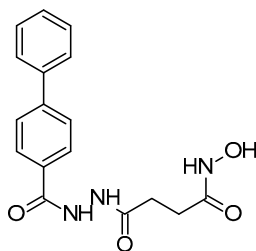


Figure S67: ^{13}C NMR spectrum view of 4-(2-benzoylhydrazinyl)-N-hydroxy-4-oxobutanamide ($\text{DMSO-}d_6$) (**2g**)

4-[2-([1,1'-biphenyl]-4-carbonyl)hydrazinyl]-N-hydroxy-4-oxobutanamide (2h)



Yield 0.91 g (69%), colorless crystals (the amount of starting *N*-substituted succinimide 1.17 g). Found, %: C 62.42; H 5.29; N 12.97; O 19.62. $C_{17}H_{17}N_3O_4$. Calculated, %: C 62.38; H 5.23; N 12.84; O 19.55. IR spectrum, ν , cm^{-1} : 3270, 2988, 1642, 1484, 1447, 1325, 1307, 1256, 1065, 969, 897, 858, 736, 695, 618, 523, 462, 369. Mass spectrum, m/z (Irel, %): 294 (4.9), 212 (4.4), 182 (14.9), 181 (100), 153 (15.2), 152 (31.3), 151 (7.8), 127 (3.7), 126 (3.2), 76 (3.0), 55 (4.6), 31 (4.1), 27 (4.9). 1H NMR spectrum (DMSO- d_6), δ , ppm (J , Hz): 2.14 – 2.30 (2H, m, -CH $_2$ -), 2.41 – 2.49 (2H, m, -CH $_2$ -), 7.42 (1H, t, J = 7.2, Ar-H), 7.50 (2H, t, J = 7.5, Ar-H), 7.75 (2H, d, J = 7.6, Ar-H), 7.80 (2H, d, J = 8.1, Ar-H), 7.97 (2H, d, J = 8.0, Ar-H), 8.65 – 8.77 (1H, m, O-H), 9.84 – 9.99 (1H, m, N-H), 10.30 – 10.70 (2H, m, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 27.6; 28.8; 126.6; 126.9; 128.1; 128.2; 129.1; 131.3; 139.1; 143.3; 165.1; 168.1; 170.7.

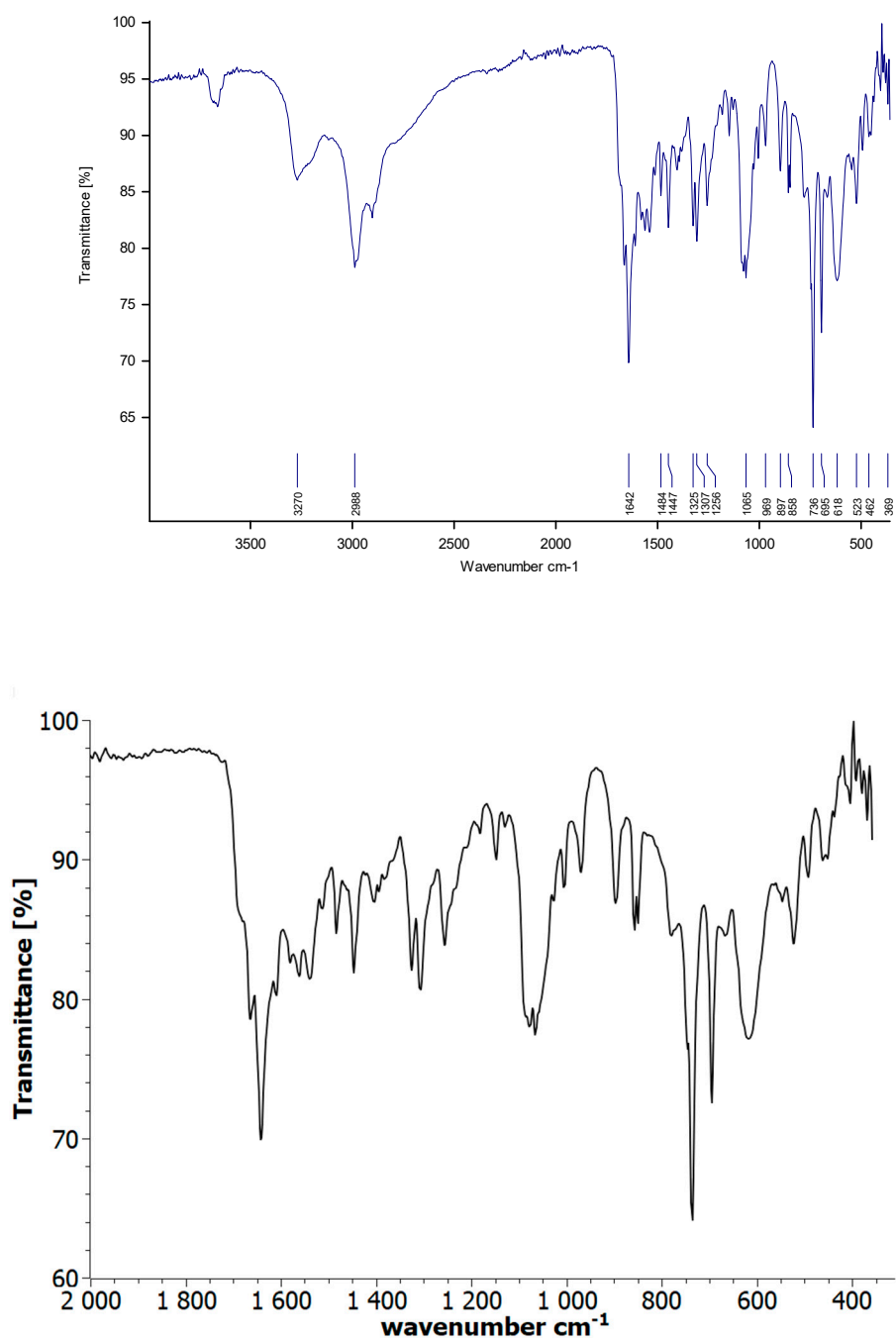


Figure S68: IR spectrum view of 4-[2-([1,1'-biphenyl]-4-carbonyl)hydrazinyl]-*N*-hydroxy-4-oxobutanamide (**2h**)

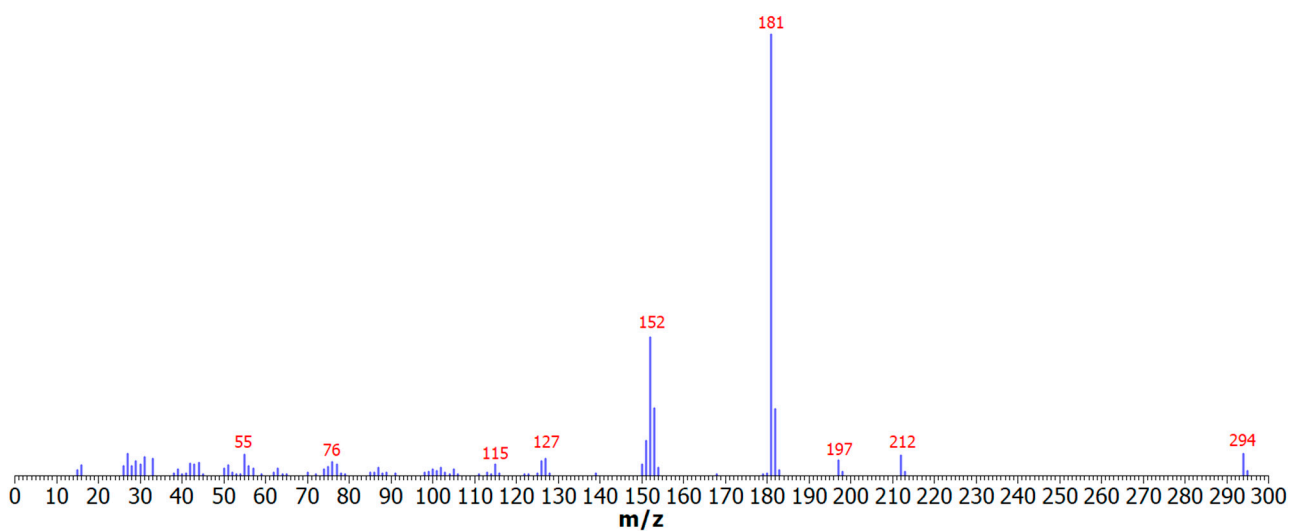


Figure S69: Mass spectrum view of 4-[2-([1,1'-biphenyl]-4-carbonyl)hydrazinyl]-N-hydroxy-4-oxobutanamide (**2h**)

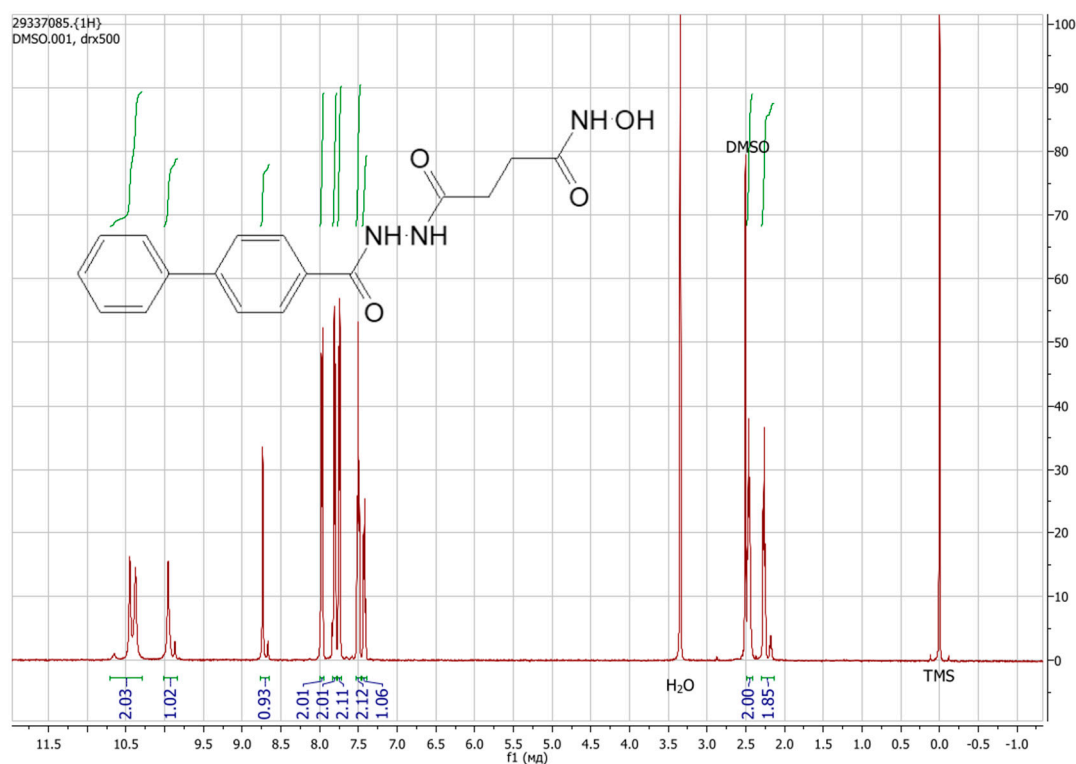


Figure S70: ¹H NMR spectrum view of 4-[2-([1,1'-biphenyl]-4-carbonyl)hydrazinyl]-N-hydroxy-4-oxobutanamide (DMSO-*d*₆) (**2h**) (the additional signals are related to *cis-trans* isomerisation [24])

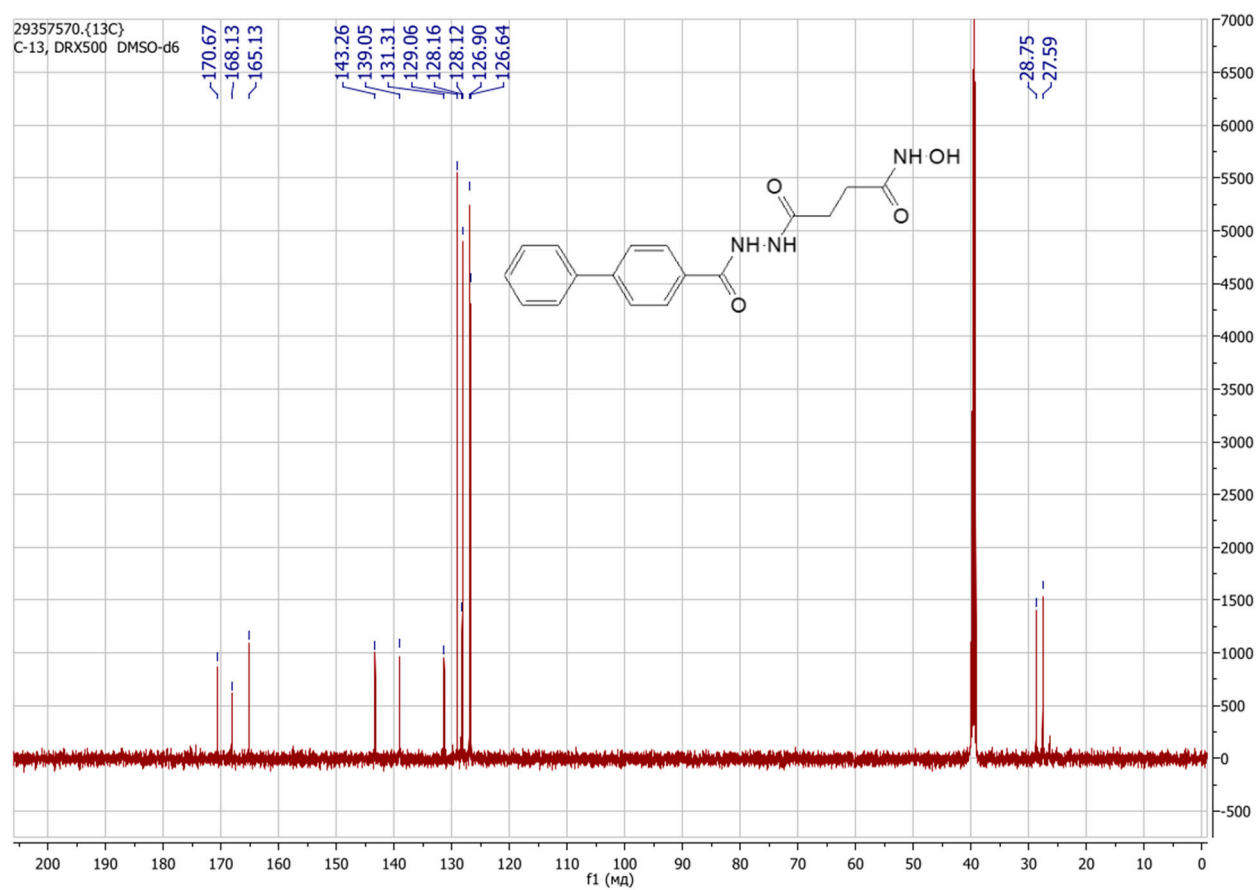
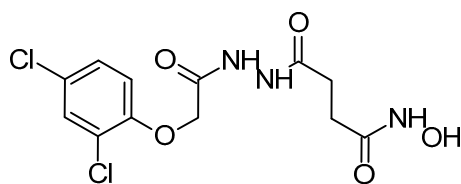


Figure S71: ^{13}C NMR spectrum view of 4-[2-([1,1'-biphenyl]-4-carbonyl)hydrazinyl]-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2h**)

4-{2-[(2,4-dichlorophenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (2i)



Yield 1.01 g (72.1%), colorless crystals (the amount of starting *N*-substituted succinimide 1.27 g). Found, %: C 41.21; H 3.80; N 12.06; O 22.91. $C_{12}H_{13}Cl_2N_3O_5$. Calculated, %: C 41.16; H 3.74; Cl 20.25; N 12.00; O 22.85. IR spectrum, ν , cm^{-1} : 3190, 2988, 1690, 1650, 1626, 1569, 1476, 1420, 1353, 1255, 1223, 1101, 1066, 1040, 997, 904, 867, 811, 742, 714, 651, 608, 586, 548, 461, 424, 377. Mass spectrum, m/z (Irel, %): 318 (2.0), 316 (6.2), 281 (2.9), 177 (8.6), 176 (1.6), 175 (17.1), 164 (29.4), 163 (4.9), 162 (46.8), 155 (26.5), 149 (6.1), 147 (21.8), 145 (22.5), 135 (5.8), 133 (11.2), 128 (9.9), 127 (73.5), 115 (6.0), 113 (7.6), 112 (5.2), 111 (30.1), 110 (5.8), 109 (23.6), 105 (5.2), 100 (15.2), 99 (21.0), 98 (9.0), 97 (5.0), 87 (5.2), 85 (11.1), 75 (29.7), 74 (24.5), 73 (40.4), 72 (13.2), 71 (9.2), 63 (48.6), 62 (22.6), 61 (12.8), 57 (21.6), 56 (23.9), 55 (73.2), 53 (9.3), 51 (9.2), 50 (13.9), 49 (7.0), 45 (40.6), 44 (57.9), 43 (44.3), 42 (82.5), 38 (19.0), 37 (16.4), 36 (20.0), 33 (26.5), 31 (77.7), 30 (56.8), 29 (100.0), 27 (75.5), 26 (40.8), 15 (23.6). 1H NMR spectrum (DMSO- d_6), δ , ppm (J , Hz): 2.13 – 2.32 (2H, m, $-CH_2-$), 2.35 – 2.41 (2H, m, $-CH_2-$), 4.72 – 4.81 (2H, m, $-CH_2-$), 7.05 – 7.14 (1H, m, Ar-H), 7.32 – 7.40 (1H, m, Ar-H), 7.56 – 7.62 (1H, m, Ar-H), 8.73 (1H, s, O-H), 9.90 – 10.15 (2H, m, N-H), 10.43 (1H, m, N-H). ^{13}C NMR spectrum (DMSO- d_6), δ , ppm: 26.8; 27.9; 29.0; 67.1; 115.9; 123.0; 125.6; 128.4; 129.8; 154.0; 166.2; 168.5; 170.6.

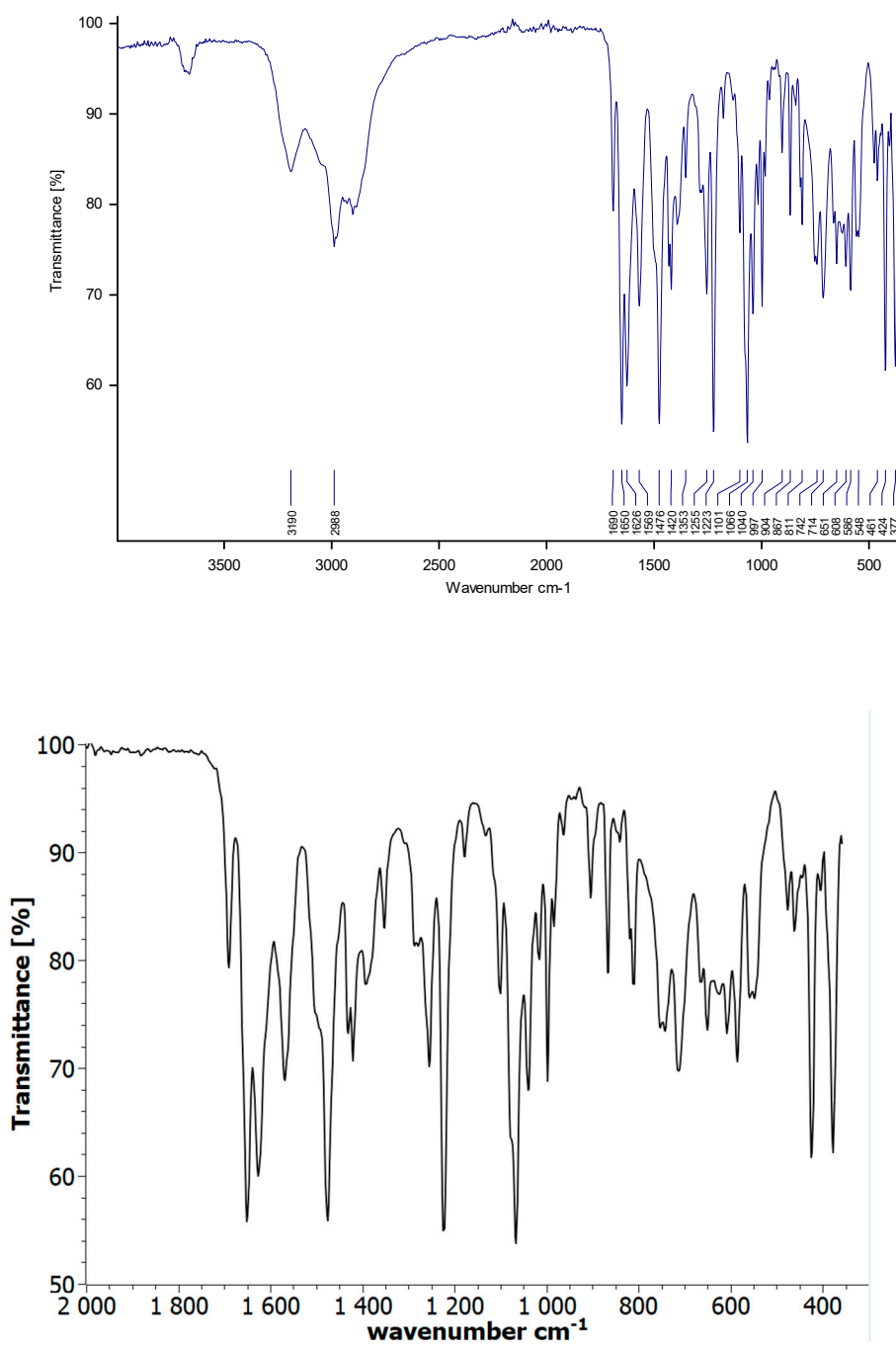


Figure S72: IR spectrum view of 4-{2-[(2,4-dichlorophenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (**2i**)

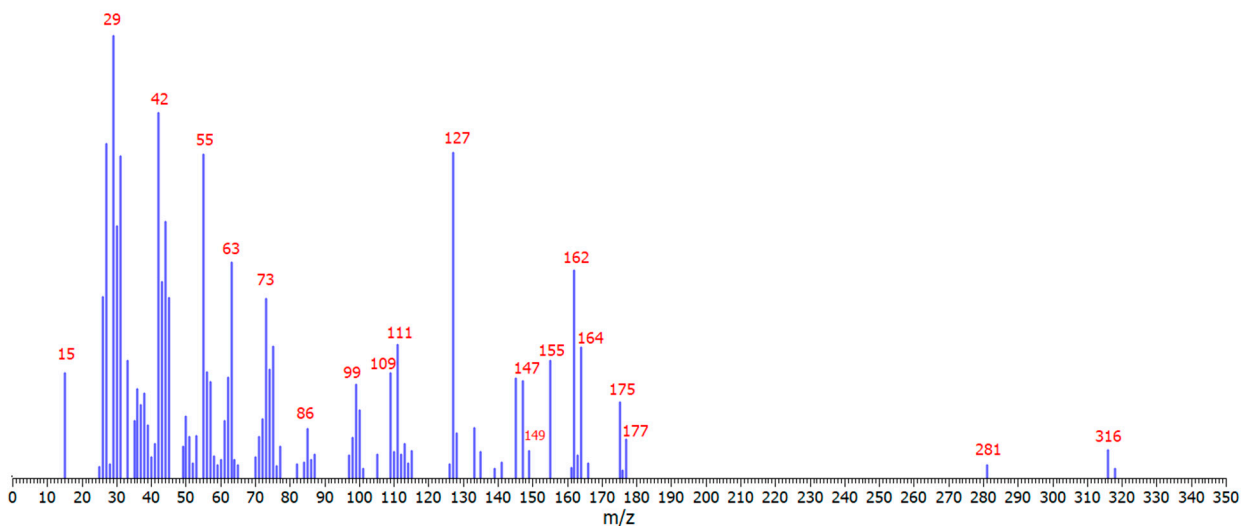


Figure S73: Mass spectrum view of 4-{2-[(2,4-dichlorophenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (**2i**)

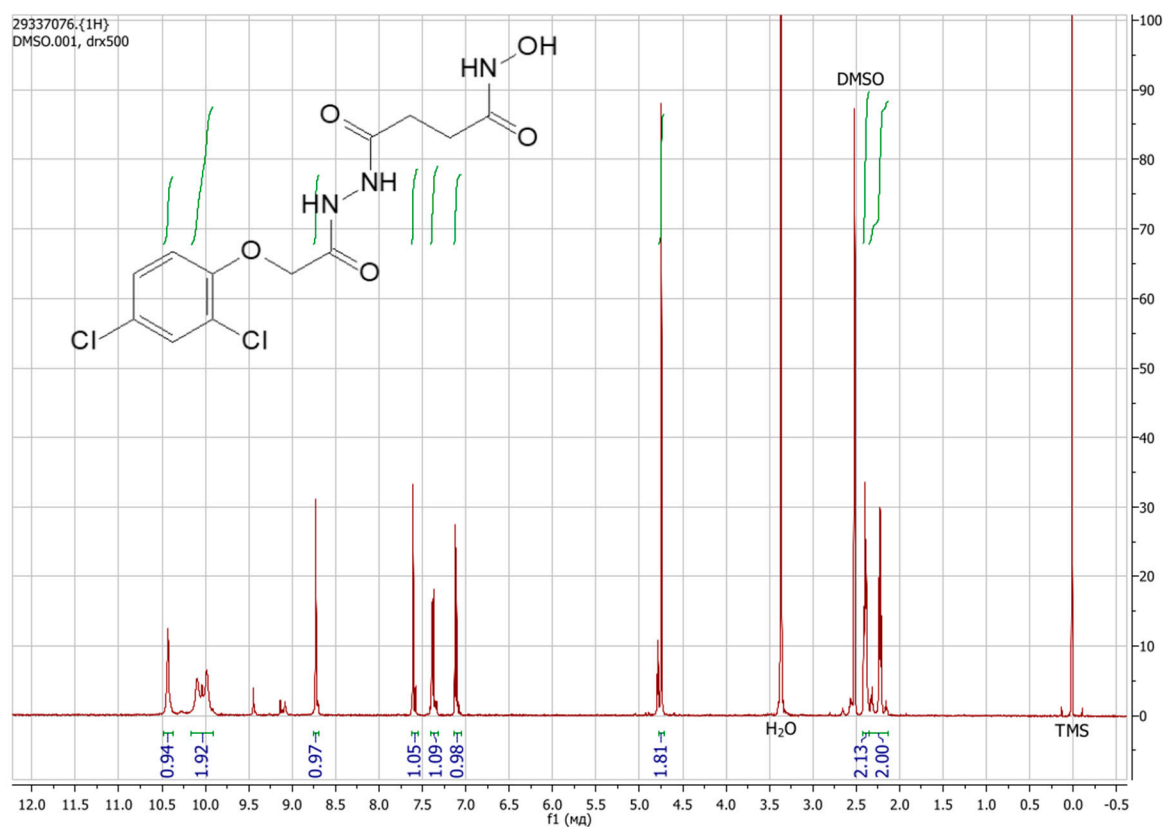


Figure S74: ^1H NMR spectrum view of 4-{2-[(2,4-dichlorophenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide ($\text{DMSO}-d_6$) (**2i**) (the additional signals are related to *cis-trans* isomerisation [24])

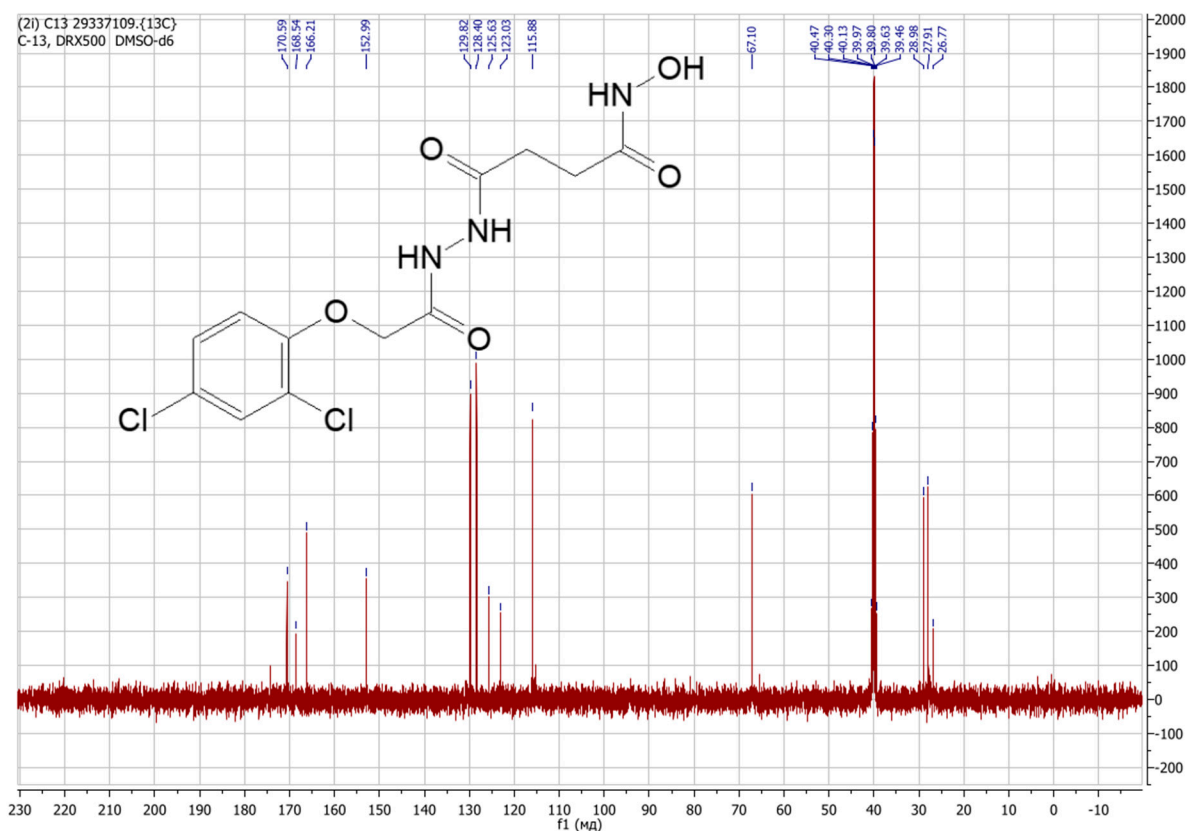
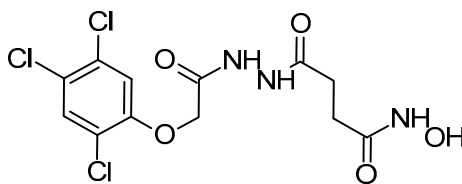


Figure S75: ^{13}C NMR spectrum view of 4-{2-[(2,4-dichlorophenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2i**)

***N*-hydroxy-4-oxo-4-{2-[(2,4,5-trichlorophenoxy)acetyl]hydrazinyl}butanamide (2j)**



Yield 0.97 g (63%), colorless crystals (the amount of starting *N*-substituted succinimide 1.4 g). Found, %: C 37.52; H 3.28; N 11.08; O 21.10. C₁₂H₁₂Cl₃N₃O₅. Calculated, %: C 37.47; H 3.14; Cl 27.65; N 10.93; O 20.80. IR spectrum, ν , cm⁻¹: 3225, 2988, 1728, 1700, 1657, 1630, 1571, 1477, 1456, 1422, 1381, 1356, 1296, 1241, 1205, 1140, 1088, 1062, 1015, 999, 967, 908, 869, 842, 733, 678, 644, 599, 549, 528, 510, 438, 393. Mass spectrum, *m/z* (Irel, %): 355 (1.8), 354 (11.4), 353 (6.6), 352 (36.7), 351 (7.2), 350 (37.9), 318 (5.6), 317 (23.9), 316 (17.1), 315 (35.5), 314 (15.0), 270 (5.9), 268 (5.1), 235 (5.1), 233 (7.2), 218 (5.8), 213 (10.1), 211 (31.2), 209 (33.3), 200 (17.0), 198 (56.8), 197 (8.2), 196 (56.4), 183 (27.2), 181 (64.5), 179 (57.0), 171 (7.4), 169 (23.3), 167 (26.6), 155 (41.9), 148 (10.8), 147 (13.2), 146 (22.9), 145 (29.2), 143 (18.2), 128 (6.1), 116 (7.8), 111 (6.8), 109 (14.9), 100 (12.3), 99 (19.0), 97 (19.0), 85 (7.9), 74 (11.9), 73 (22.03), 71 (7.9), 62 (9.8), 61 (7.5), 57 (10.8), 56 (11.0), 55 (33.0), 45 (15.2), 44 (14.9), 43 (13.4), 41 (27.0), 36 (6.7), 33 (15.4), 32 (7.6), 30 (14.7), 29 (23.2), 28 (41.5), 27 (18.8), 16 (12.6). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.15 – 2.33 (2H, m, -CH₂-), 2.38 (2H, t, *J* = 7.4, -CH₂-), 4.79 – 4.86 (2H, m, -CH₂-), 7.38 (1H, s, Ar-H), 7.80 – 7.85 (1H, m, Ar-H), 8.66 – 8.75 (1H, m, O-H), 9.90 – 10.15 (2H, m, N-H), 10.41 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 27.9; 29.0; 67.3; 116.4; 121.8; 123.9; 130.8; 131.1; 153.4; 166.0; 168.5; 170.6.

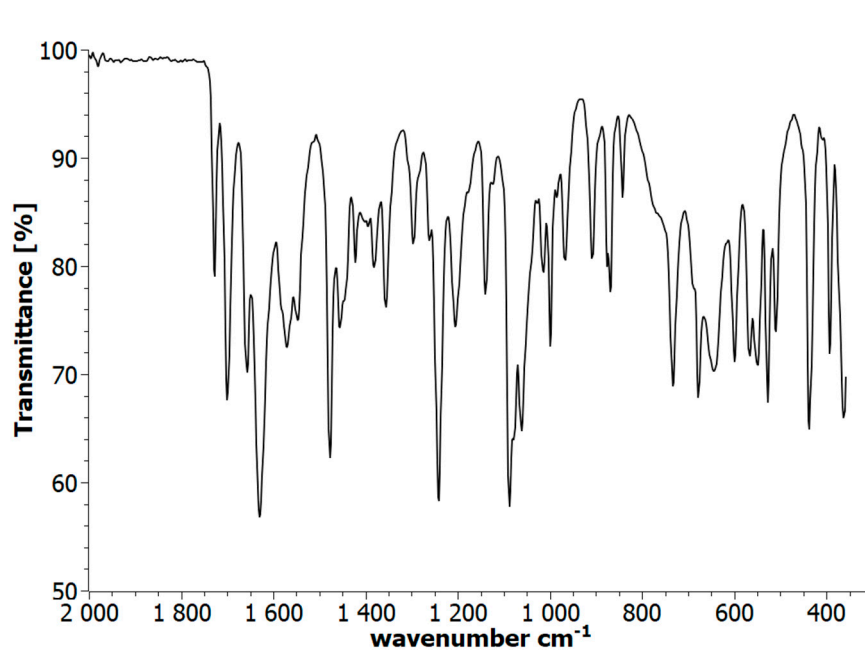
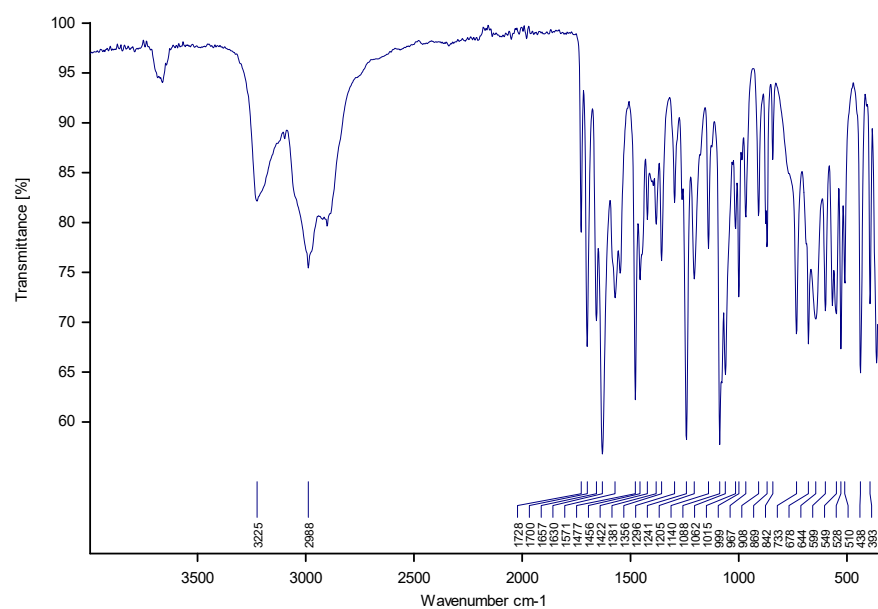


Figure S76: IR spectrum view of *N*-hydroxy-4-oxo-4-{2-[(2,4,5-trichlorophenoxy)acetyl]hydrazinyl}butanamide (**2j**)

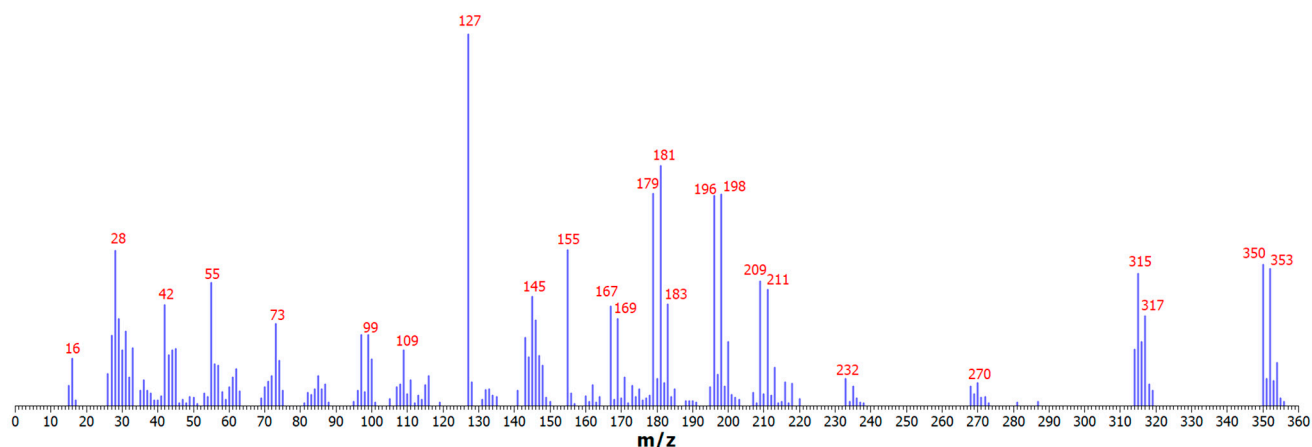


Figure S77: Mass spectrum view of *N*-hydroxy-4-oxo-4-{2-[(2,4,5-trichlorophenoxy)acetyl]hydrazinyl}butanamide (**2j**)

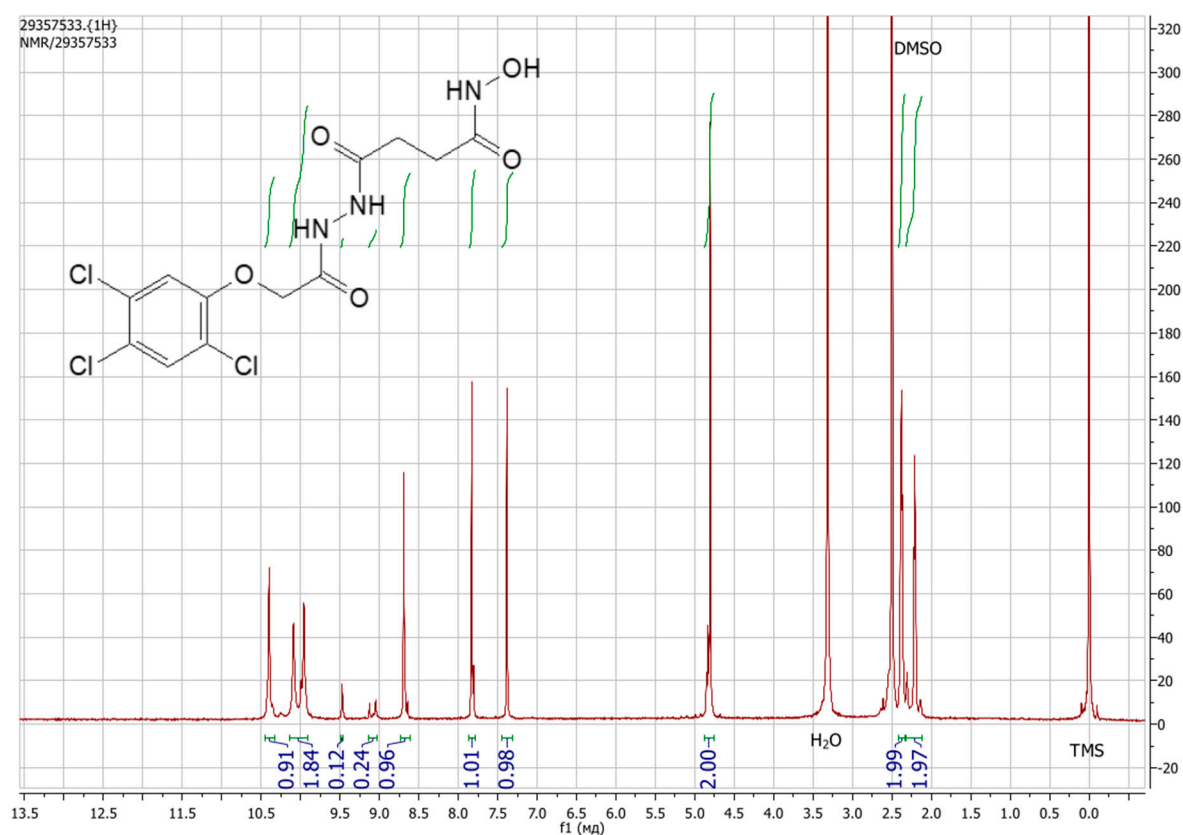


Figure S78: ^1H NMR spectrum view of *N*-hydroxy-4-oxo-4-{2-[(2,4,5-trichlorophenoxy)acetyl]hydrazinyl}butanamide ($\text{DMSO-}d_6$) (**2j**) (acquired on a Bruker DRX-600, the additional signals are related to *cis-trans* isomerisation [24])

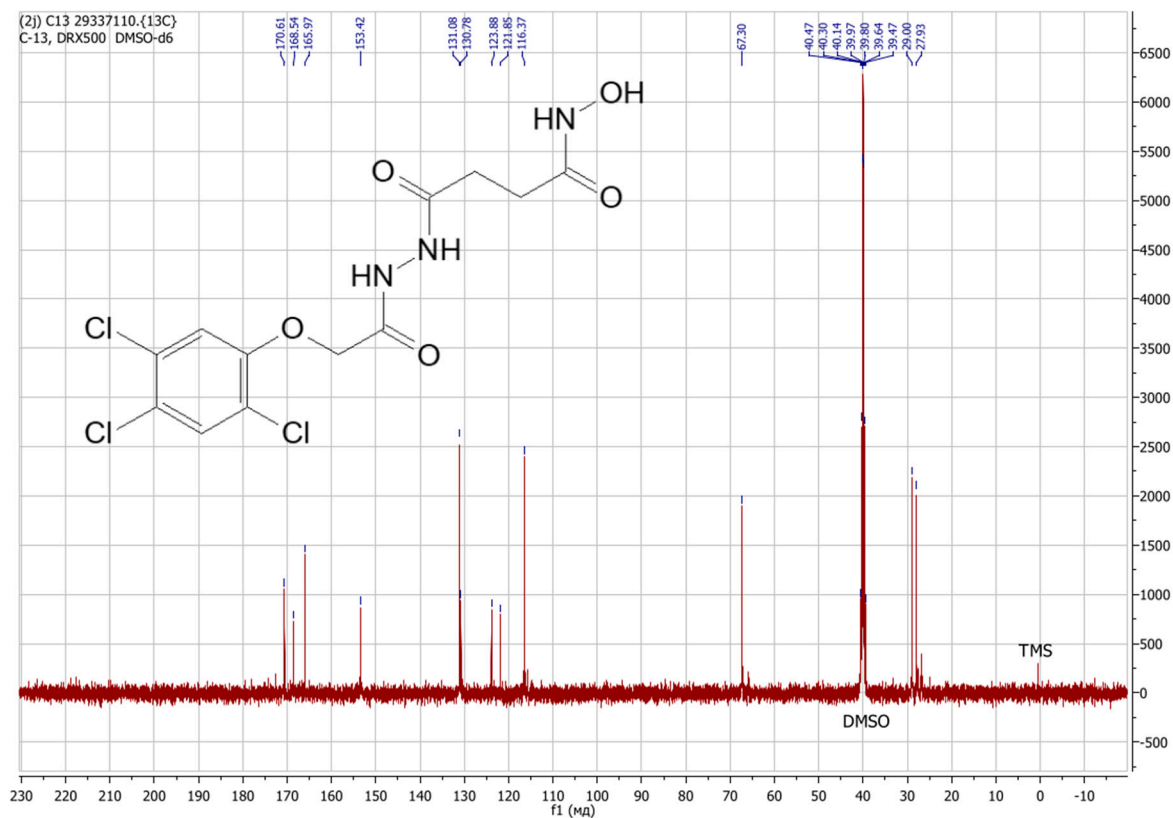
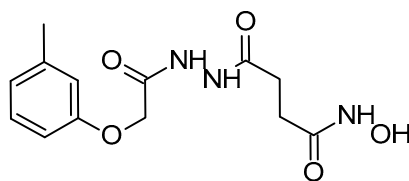


Figure S79: ^{13}C NMR spectrum view of *N*-hydroxy-4-oxo-4-{2-[(2,4,5-trichlorophenoxy)acetyl]hydrazinyl}butanamide (DMSO- d_6) (**2j**)

***N*-hydroxy-4-{2-[(3-methylphenoxy)acetyl]hydrazinyl}-4-oxobutanamide (2k)**



Yield 0.41 g (35%), colorless crystals (the amount of starting *N*-substituted succinimide 1.0 g). Found, %: C 52.99; H 5.88; N 14.14; O 27.15. C₁₃H₁₇N₃O₅. Calculated, %: C 52.88; H 5.80; N 14.23; O 27.09. IR spectrum, ν , cm⁻¹: 3209, 2988, 1705, 1656, 1517, 1494, 1433, 1347, 1264, 1170, 1067, 967, 934, 775, 688, 571, 460, 440, 378. Mass spectrum, *m/z* (Irel, %): 263 (6.1), 262 (40.0), 127 (17.2), 121 (23.2), 109 (9.6), 108 (100), 107 (13.8), 100 (5.9), 93 (11.2), 92 (7.3), 91 (85.5), 90 (7.8), 89 (12.7), 79 (11.2), 78 (9.3), 77 (26.3), 65 (47.8), 64 (5.4), 63 (17.6), 62 (5.1), 57 (12.0), 56 (13.6), 55 (44.0), 53 (9.9), 52 (9.4), 51 (18.9), 50 (9.9), 45 (13.6), 44 (25.6), 43 (20.6), 42 (41.5), 41 (11.7), 39 (38.2), 38 (8.7), 33 (42.5), 32 (15.3), 31 (44.7), 30 (35.8), 29 (50.5), 28 (98.4), 27 (68.2), 26 (28.7), 17 (20.2), 16 (49.5), 15 (22.5). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.19 – 2.34 (5H, m, -CH₂-, -CH₃), 2.41 (2H, t, *J* = 7.4, -CH₂-), 4.54 – 4.63 (2H, m, -CH₂-), 6.75 – 6.85 (3H, m, Ar-H), 7.18 (1H, t, *J* = 7.8), 8.68 – 8.76 (1H, m, O-H), 9.85 – 10.10 (2H, m, N-H), 10.36 – 10.47 (1H, m, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 21.6; 28.0; 29.1; 66.4; 112.2; 115.8; 122.4; 129.6; 139.4; 158.2; 167.1; 168.6; 170.7.

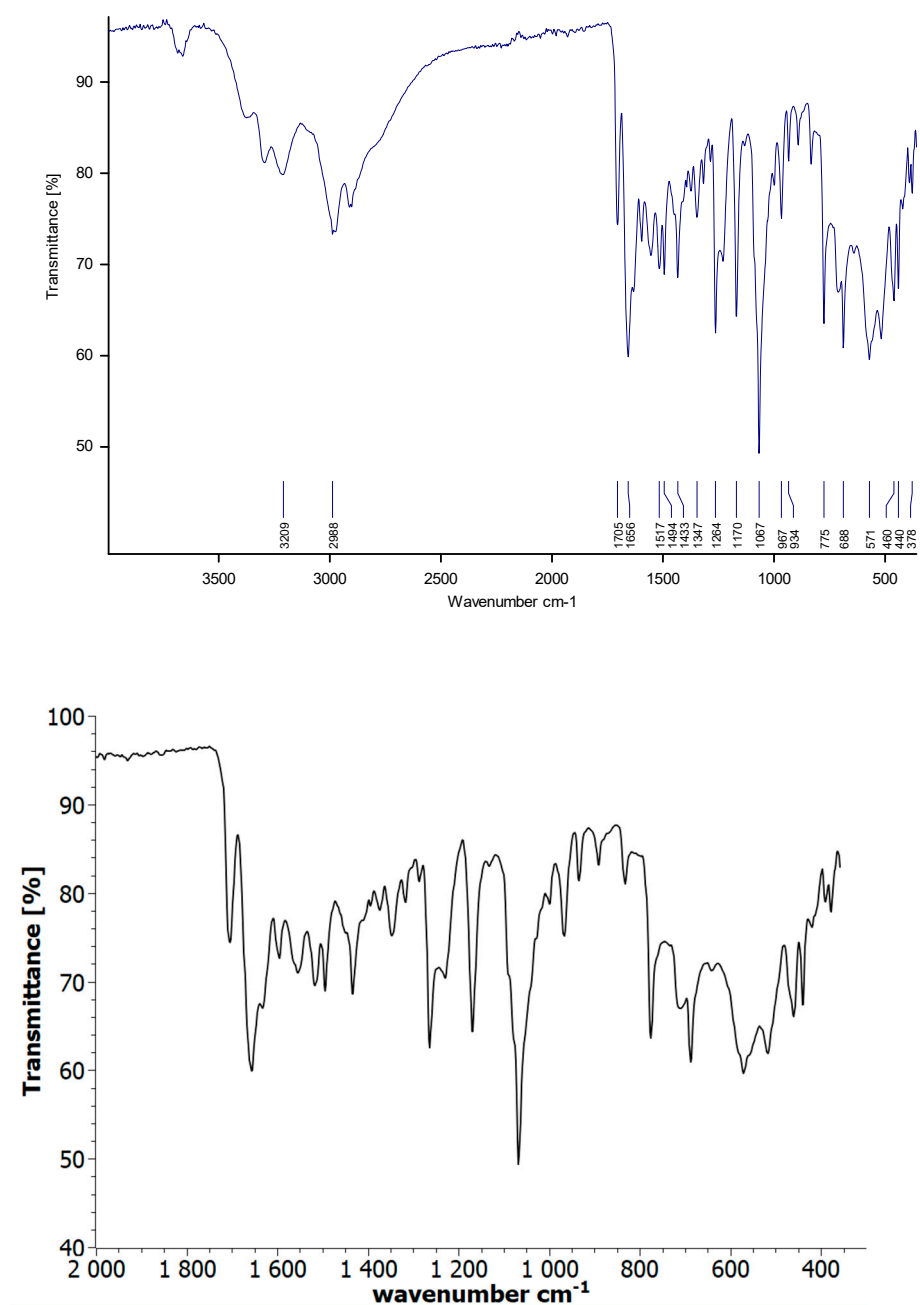


Figure S80: IR spectrum view of *N*-hydroxy-4-{2-[(3-methylphenoxy)acetyl]hydrazinyl}-4-oxobutanamide (**2k**)

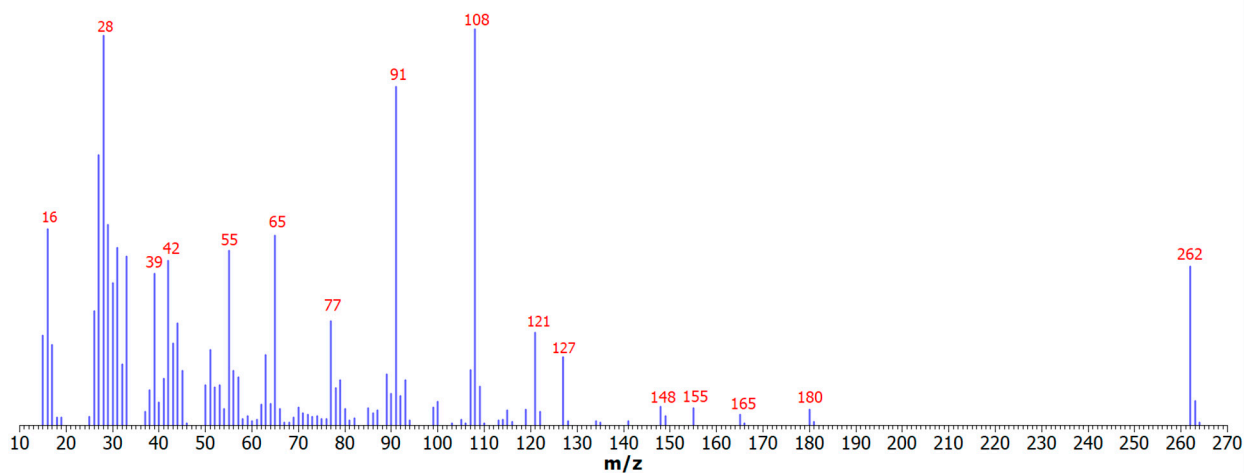


Figure S81: Mass spectrum view of *N*-hydroxy-4-{2-[(3-methylphenoxy)acetyl]hydrazinyl}-4-oxobutanamide (**2k**)

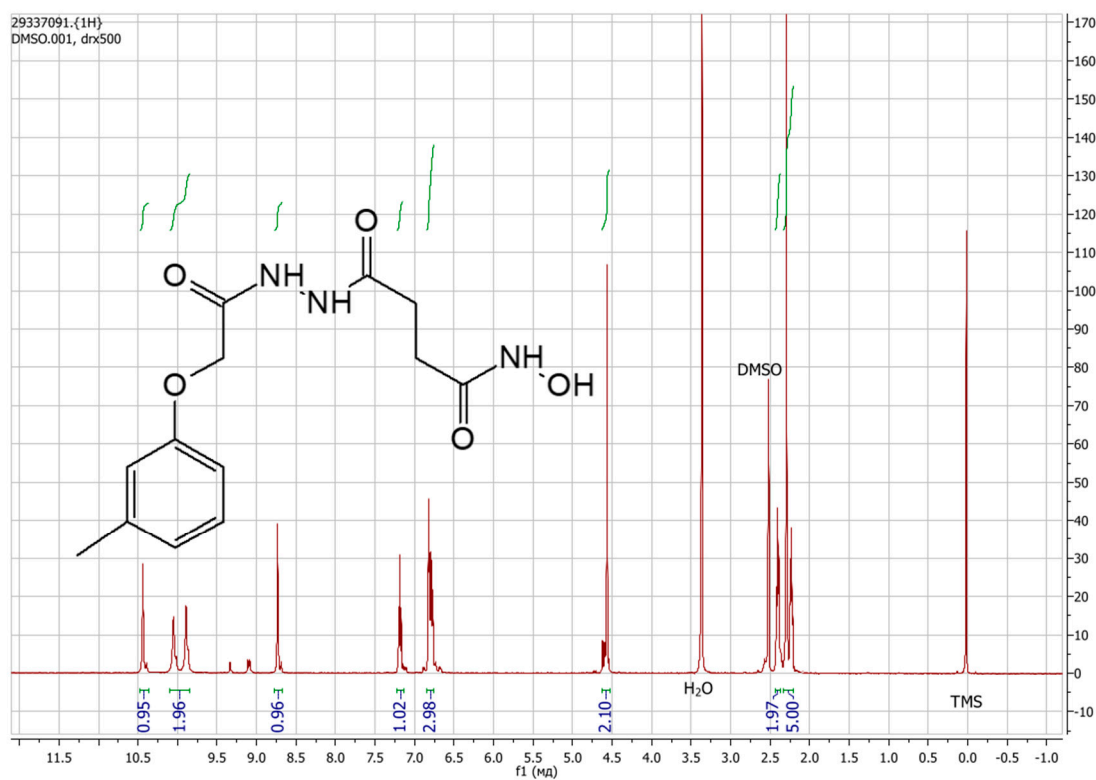


Figure S82: ^1H NMR spectrum view of *N*-hydroxy-4-{2-[(3-methylphenoxy)acetyl]hydrazinyl}-4-oxobutanamide ($\text{DMSO-}d_6$) (**2k**) (the additional signals are related to *cis-trans* isomerisation [24])

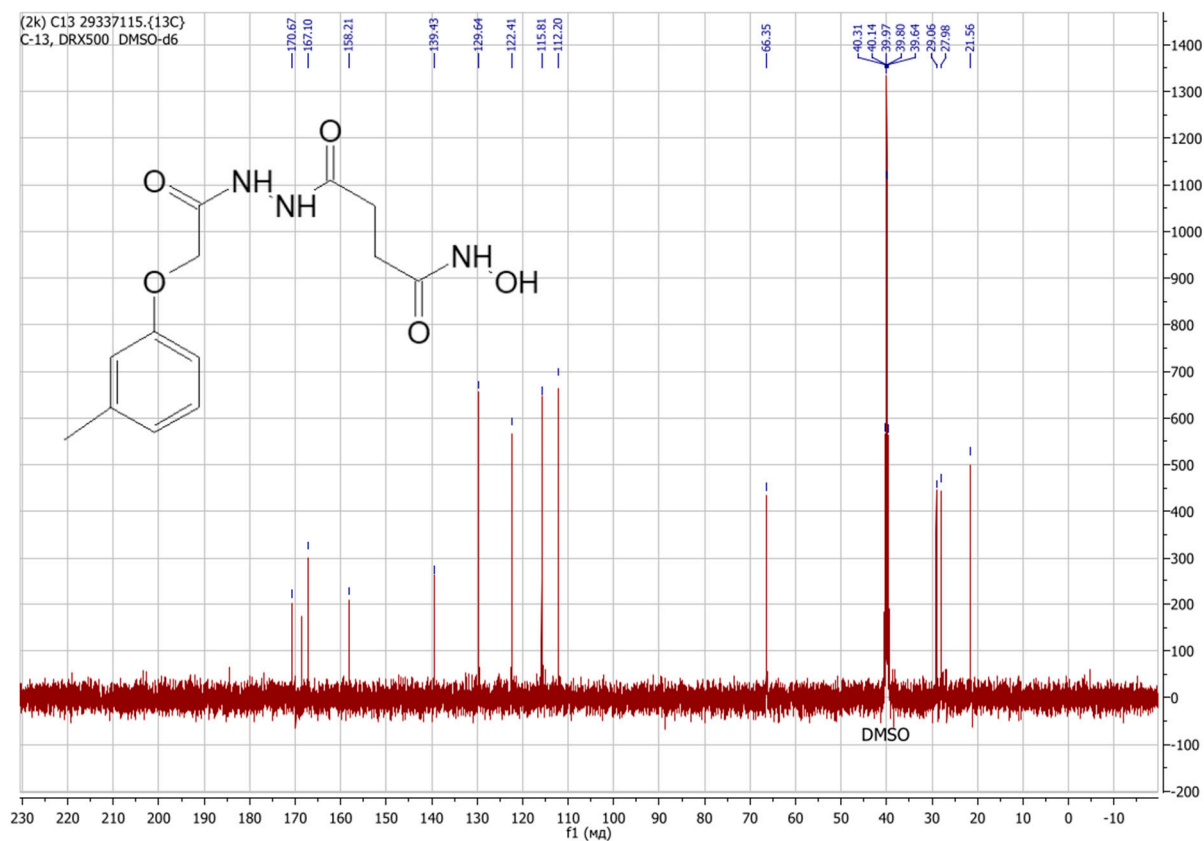
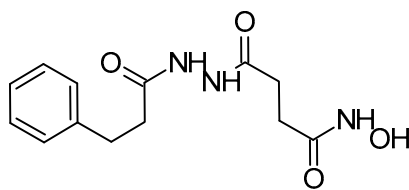


Figure S83: ¹³C NMR spectrum view of *N*-hydroxy-4-{2-[(3-methylphenoxy)acetyl]hydrazinyl}-4-oxobutanamide (DMSO-*d*₆) (**2k**)

***N*-hydroxy-4-oxo-4-[2-(3-phenylpropanoyl)hydrazinyl]butanamide (2l)**



Yield 0.48 g (43%), colorless crystals (the amount of starting *N*-substituted succinimide 0.98 g). Found, %: C 56.02; H 5.98; N 15.09; O 23.02. C₁₃H₁₇N₃O₄. Calculated, %: C 55.91; H 6.14; N 15.05; O 22.91. IR spectrum, ν , cm⁻¹: 3212, 1598, 1558, 1485, 1447, 1330, 1283, 1163, 1121, 1069, 1001, 979, 896, 796, 696, 653, 517. Mass spectrum, *m/z* (Irel, %): 247 (8.5), 246 (22.3), 165 (7.43), 164 (21.0), 133 (11.2), 132 (6.3), 131 (7.8), 116 (10.1), 115 (11.2), 106 (7.2), 105 (84.9), 104 (49.1), 103 (15.6), 100 (16.2), 92 (7.3), 91 (100), 79 (12.2), 78 (13.9), 77 (23.4), 65 (11.9), 56 (6.0), 55 (19.7), 51 (12.2), 44 (17.4), 43 (6.5), 42 (11.8), 39 (8.6), 31 (9.9), 30 (6.2), 29 (8.5), 27 (19.4), 26 (5.7). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.04 – 2.24 (2H, m, -CH₂-), 2.30 – 2.47 (4H, m, -CH₂-), 2.73 – 2.87 (2H, m, -CH₂-), 7.15 – 7.30 (5H, m, Ar-H), 8.64 – 8.73 (1H, m, O-H), 9.71 – 9.93 (2H, m, N-H), 10.32 – 10.45 (1H, m, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 28.0; 29.0; 31.2; 35.2; 126.4; 128.7; 128.8; 141.5; 168.6; 170.5; 170.7.

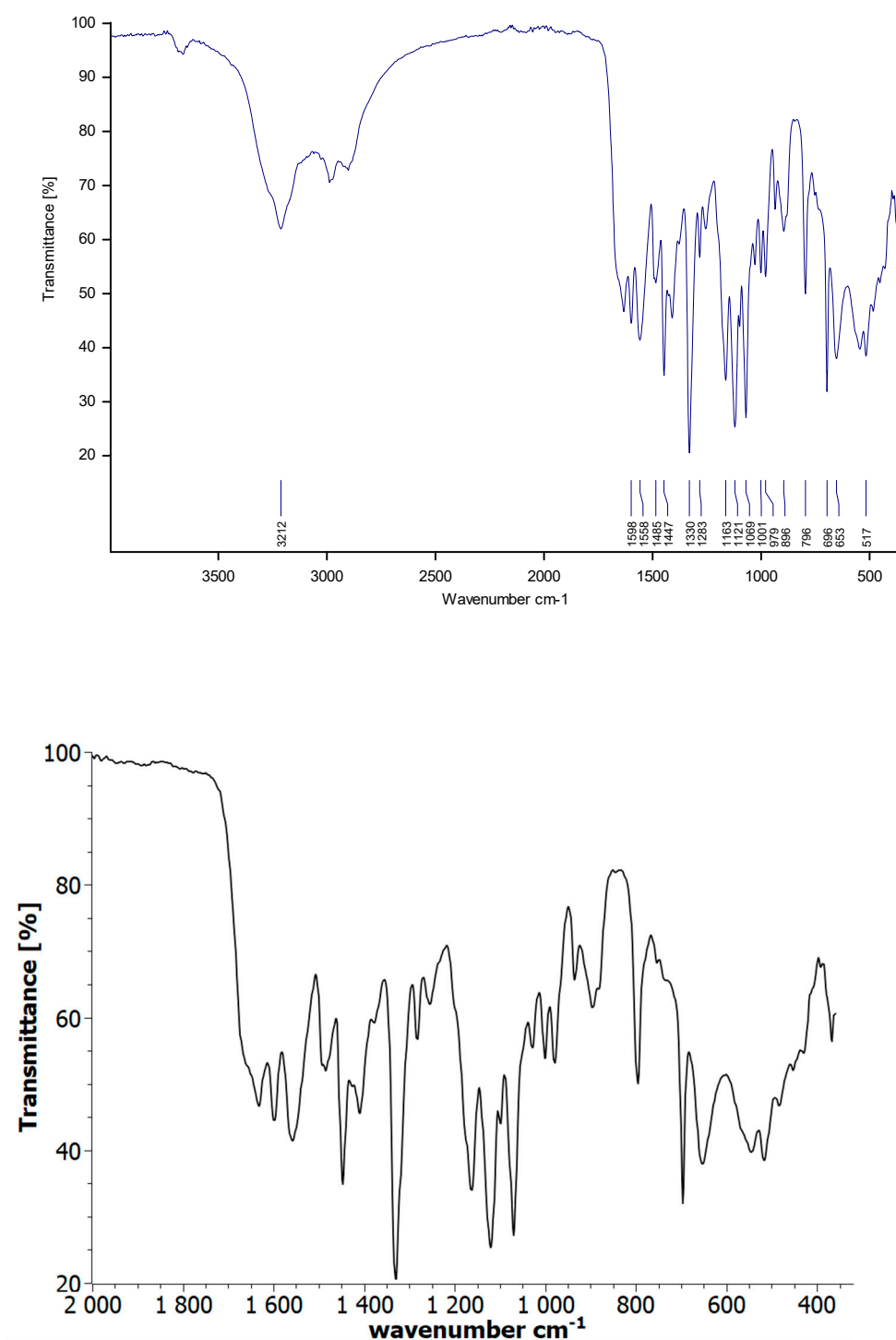


Figure S84: IR spectrum view of *N*-hydroxy-4-oxo-4-[2-(3-phenylpropanoyl)hydrazinyl]butanamide (**21**)

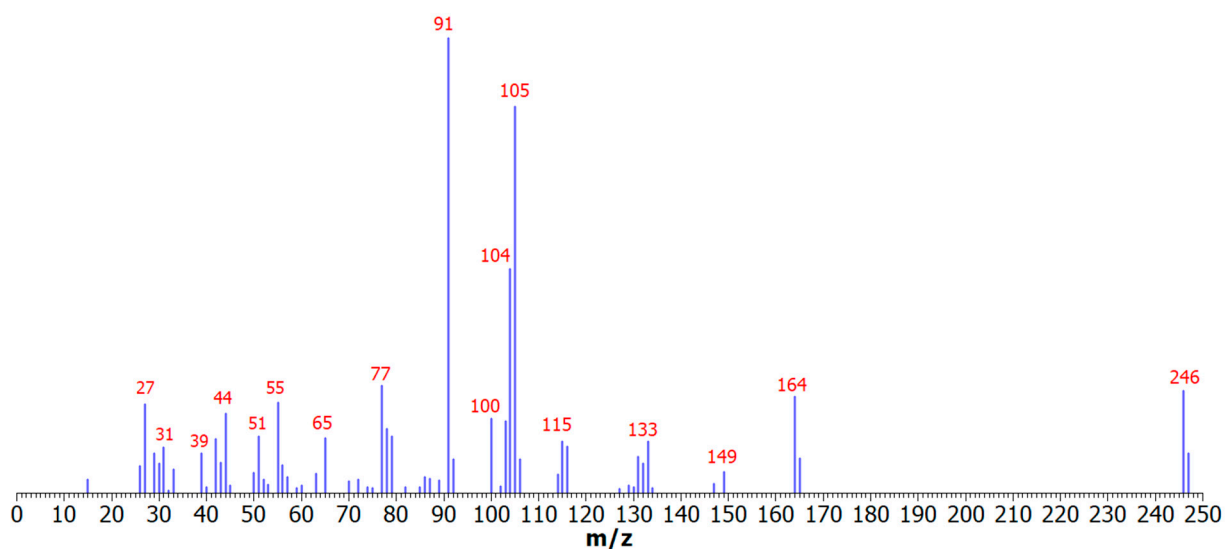


Figure S85: Mass spectrum view of *N*-hydroxy-4-oxo-4-[2-(3-phenylpropanoyl)hydrazinyl]butanamide (**21**)

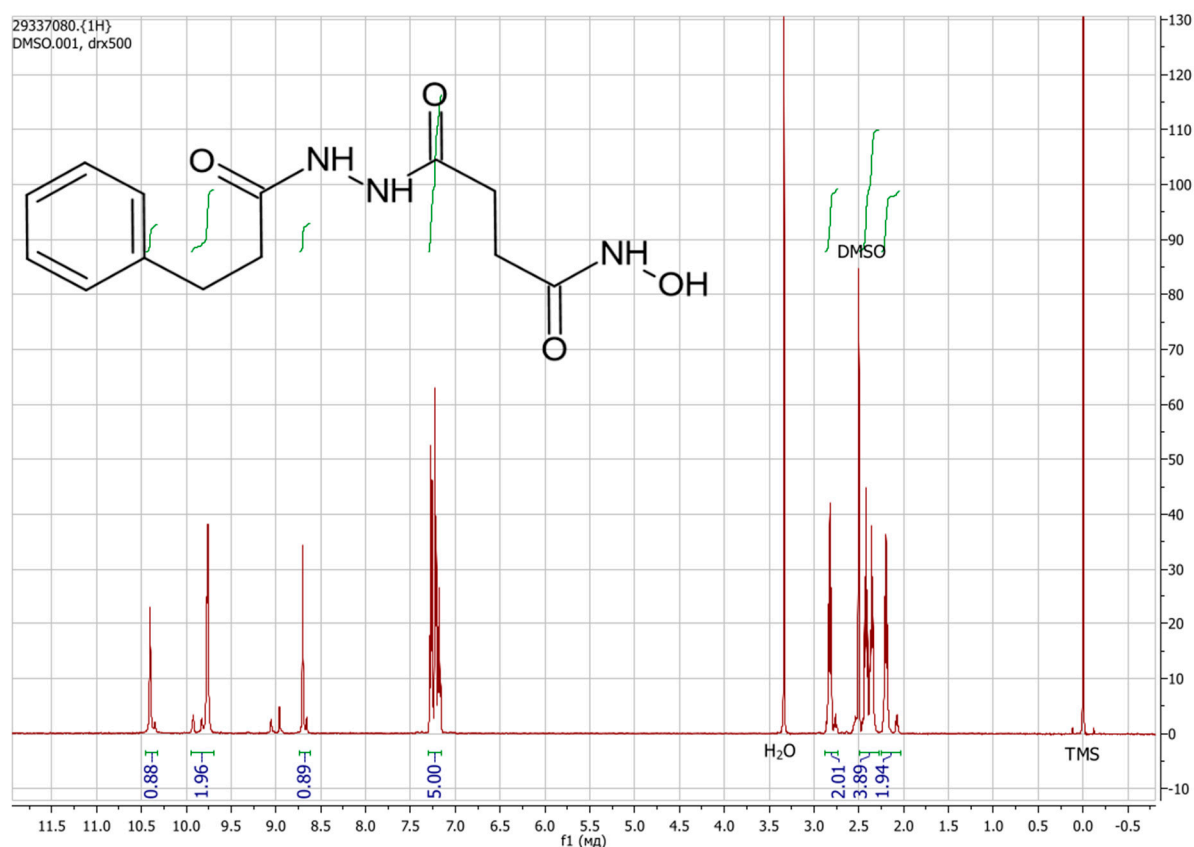


Figure S86: ^1H NMR spectrum view of *N*-hydroxy-4-oxo-4-[2-(3-phenylpropanoyl)hydrazinyl]butanamide ($\text{DMSO}-d_6$) (**21**) (the additional signals are related to *cis-trans* isomerisation [24])

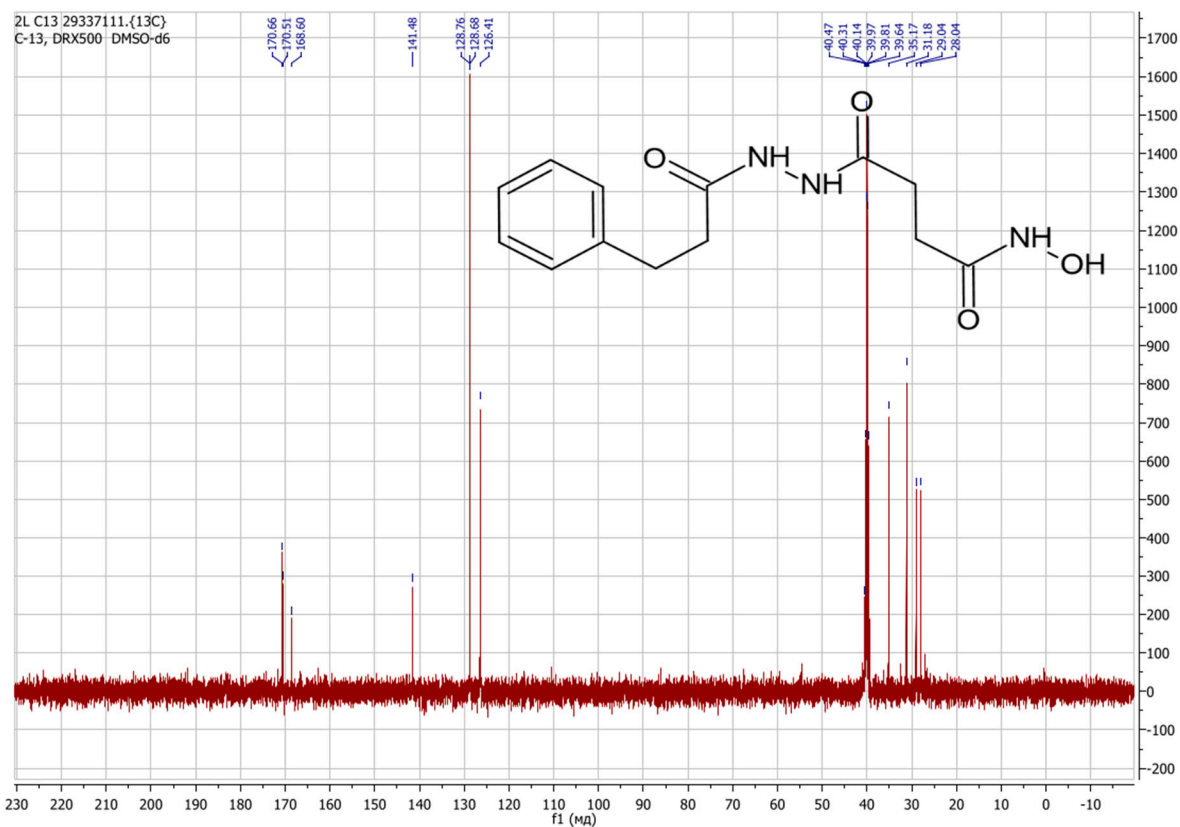
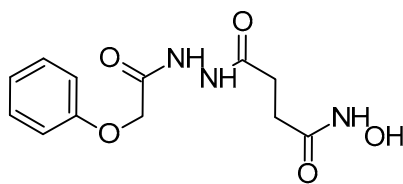


Figure S87: ^{13}C NMR spectrum view of *N*-hydroxy-4-oxo-4-[2-(3-phenylpropanoyl)hydrazinyl]butanamide (DMSO- d_6) (**21**)

***N*-hydroxy-4-oxo-4-[2-(phenoxyacetyl)hydrazinyl]butanamide (2m)**



Yield 0.51 g (46%), colorless crystals (the amount of starting *N*-substituted succinimide 1.0 g). Found, %: C 51.16; H 5.45; N 15.01; O 28.33. C₁₂H₁₅N₃O₅. Calculated, %: C 51.24; H 5.38; N 14.94; O 28.44. IR spectrum, ν , cm⁻¹: 3225, 2988, 1699, 1664, 1560, 1502, 1434, 1293, 1224, 1069, 971, 890, 748, 690, 585, 509, 466, 368. Mass spectrum, *m/z* (Irel, %): 249 (4.0), 248 (27.0), 127 (47.3), 107 (26.8), 100 (9.8), 99 (6.9), 95 (5.6), 94 (66.4), 79 (22.2), 78 (11.4), 77 (100), 66 (11.2), 65 (23.4), 63 (11.0), 57 (11.4), 56 (12.3), 55 (41.7), 52 (5.5), 51 (45.5), 50 (16.3), 45 (11.5), 44 (31.9), 43 (20.0), 42 (38.9), 41 (5.4), 40 (7.3), 39 (43.6), 38 (13.2), 37 (5.5), 33 (22.2), 32 (10.0), 31 (24.7), 30 (27.1), 29 (43.8), 28 (71.7), 27 (46.5), 26 (25.4), 16 (19.0), 15 (12.5). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.10 – 2.30 (2H, m, -CH₂-), 2.39 (2H, t, *J* = 7.5, -CH₂-), 4.54 – 4.64 (2H, m, -CH₂-), 6.85 – 7.00 (3H, m, Ar-H), 7.23 – 7.34 (2H, m, Ar-H), 8.65 – 8.76 (1H, m, -OH), 9.75 -10.15 (2H, m, N-H), 10.35 – 10.45 (1H, m, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 28.0; 31.9; 55.6; 114.2; 120.9; 133.0; 155.4; 168.8; 168.9 170.1.

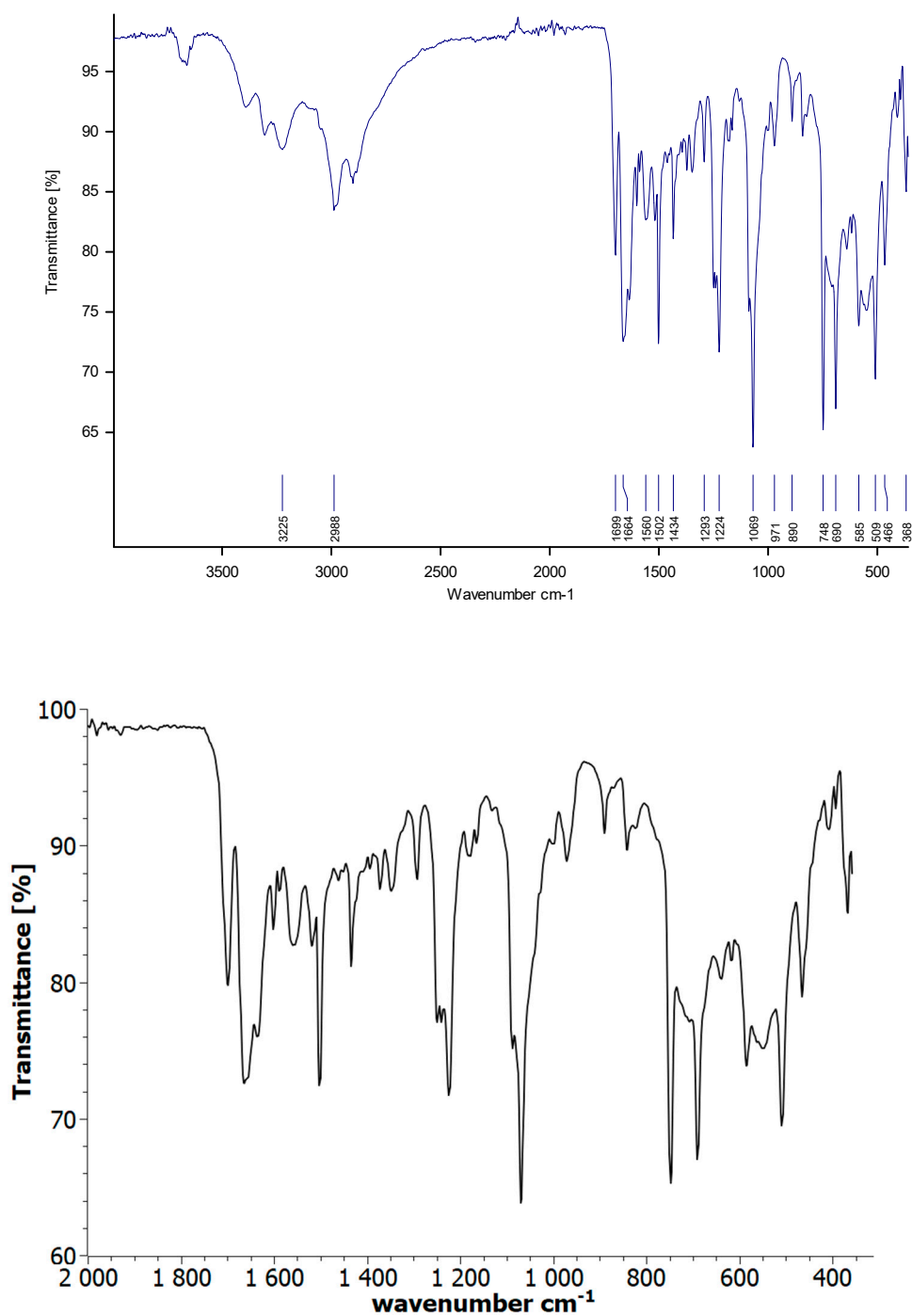


Figure S88: IR spectrum view of *N*-hydroxy-4-oxo-4-[2-(phenoxyacetyl)hydrazinyl]butanamide (**2m**)

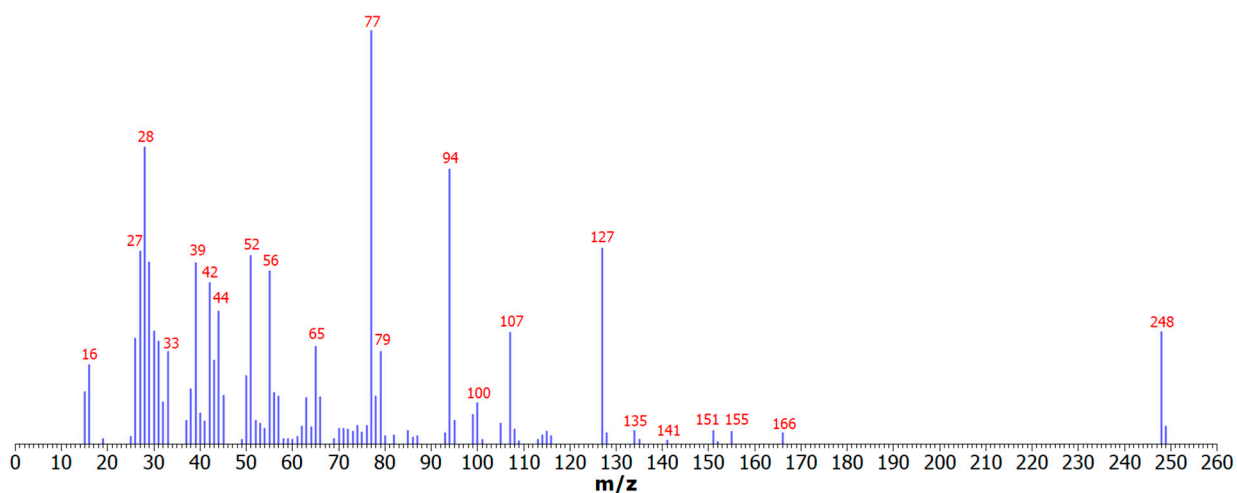


Figure S89: Mass spectrum view of *N*-hydroxy-4-oxo-4-[2-(phenoxyacetyl)hydrazinyl]butanamide (**2m**)

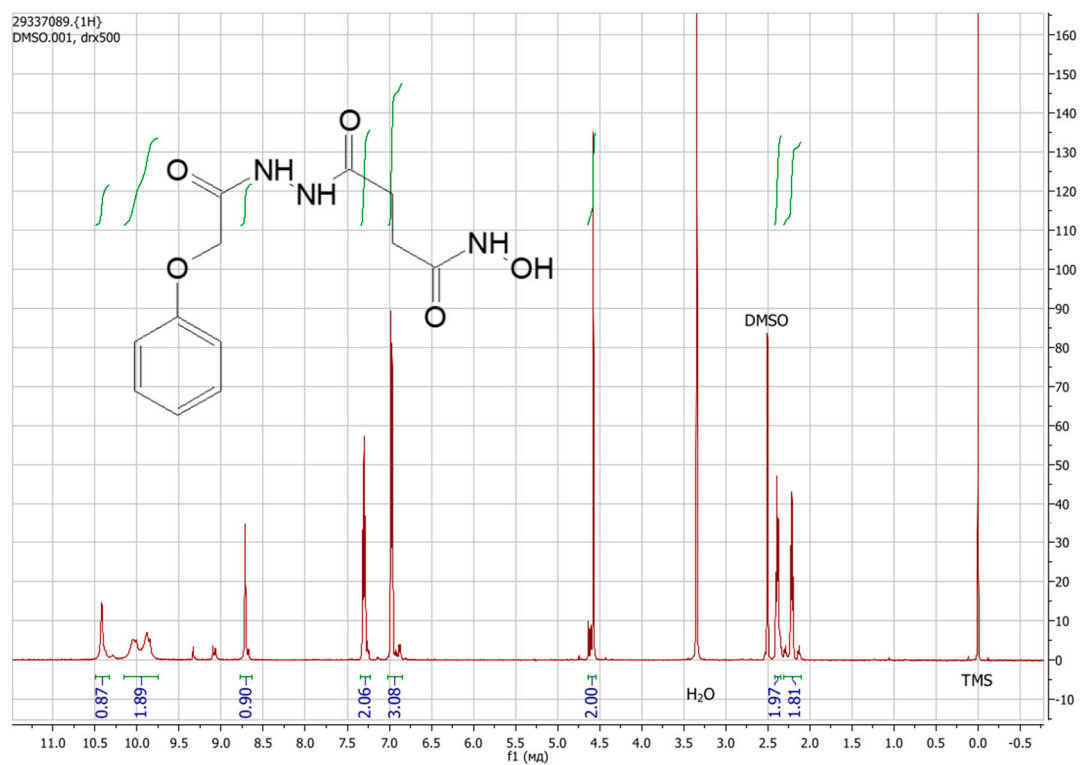


Figure S90: ^1H NMR spectrum view of *N*-hydroxy-4-oxo-4-[2-(phenoxyacetyl)hydrazinyl]butanamide ($\text{DMSO}-d_6$) (**2m**) (the additional signals are related to *cis-trans* isomerisation [24])

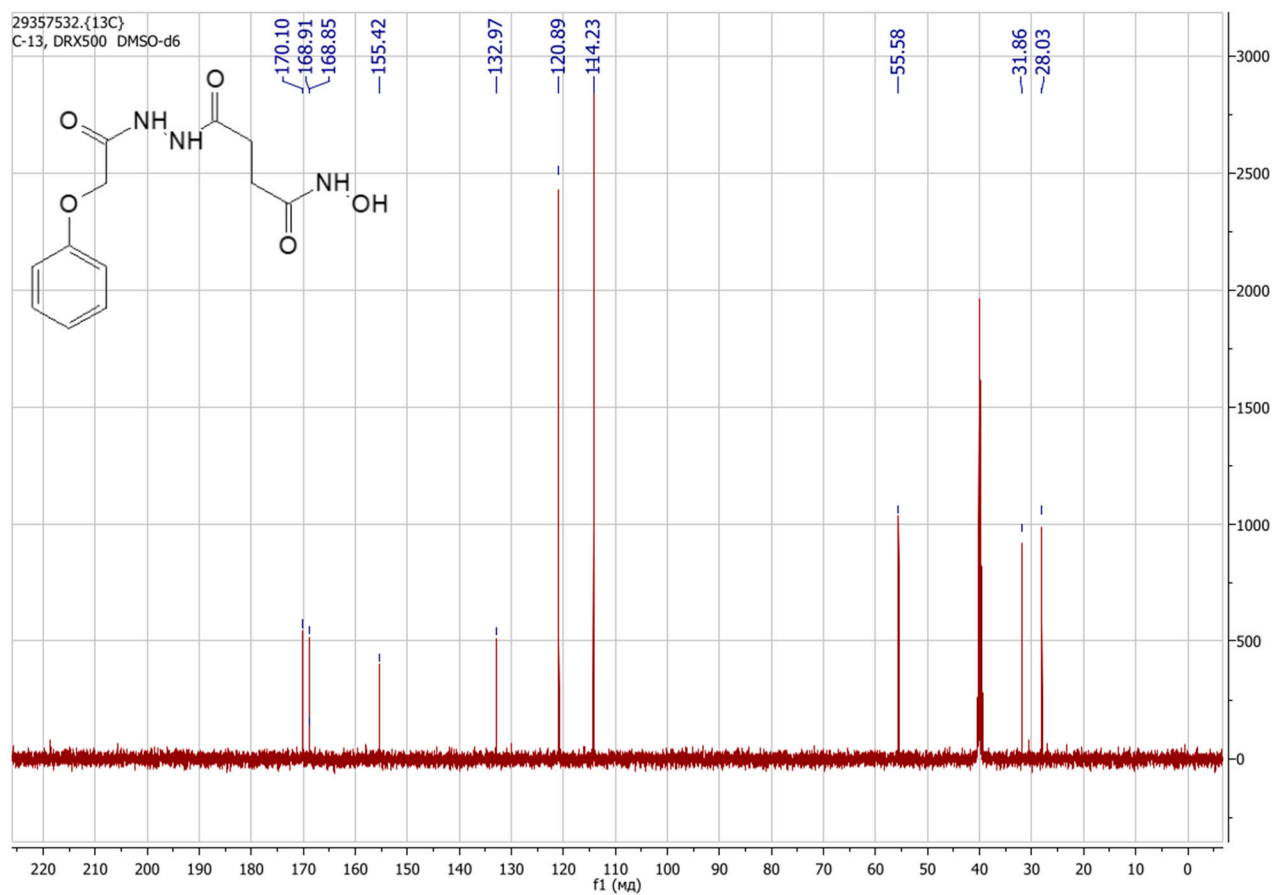
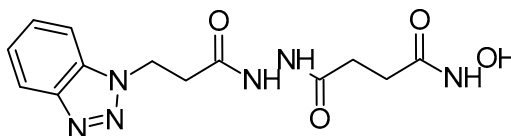


Figure S91: ^{13}C NMR spectrum view of *N*-hydroxy-4-oxo-4-[2-(phenoxyacetyl)hydrazinyl]butanamide (DMSO- d_6) (**2m**)

4-{2-[3-(1*H*-benzotriazol-1-yl)propanoyl]hydrazinyl}-*N*-hydroxy-4-oxobutanamide

(2n)



Yield 1.09 g (85%), colorless crystals (the amount of starting *N*-substituted succinimide 1.15 g). Found, %: C 48.88; H 5.09; N 26.35; O 20.13. C₁₃H₁₆N₆O₄. Calculated, %: C 48.75; H 5.03; N 26.24; O 19.98. IR spectrum, ν , cm⁻¹: 3192, 2987, 1649, 1594, 1492, 1455, 1413, 1277, 1223, 1196, 1161, 1080, 979, 939, 775, 755, 742, 664, 545, 522, 428. Mass spectrum, *m/z* (Irel, %): 287 (2.7), 205 (1.5), 174 (28.0), 146 (24.0), 141 (5.2), 120 (7.5), 119 (11.1), 118 (11.4), 117 (9.5), 114 (7.5), 104 (13.5), 93 (4.5), 91 (21.3), 90 (24.9), 89 (4.6), 86 (10.9), 85 (6.6), 78 (6.8), 77 (52.6), 76 (9.8), 70 (6.3), 69 (5.3), 65 (12.0), 64 (22.5), 63 (24.1), 62 (6.4), 59 (5.2), 57 (12.7), 56 (19.0), 55 (97.0), 54 (6.0), 52 (9.4), 51 (30.0), 50 (15.3), 44 (15.7), 43 (16.5), 42 (48.4), 41 (8.3), 39 (31.5), 38 (12.1), 33 (8.1), 31 (34.9), 30 (17.8), 29 (48.4), 28 (35.5), 27 (100), 26 (37.7), 15 (14.6).). ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 1.97 – 2.27 (2H, m, -CH₂-), 2.30 – 2.40 (2H, m, -CH₂-), 2.87 – 2.99 (2H, m, -CH₂-), 4.84 – 4.98 (2H, m, -CH₂-), 7.41 (1H, t, *J* = 7.6, Ar-H), 7.57 (1H, t, *J* = 7.6, Ar-H), 7.87 – 7.93 (1H, m, Ar-H), 8.04 (1H, d, *J* = 8.3, Ar-H), 8.64 – 8.74 (1H, m, -OH), 9.75 – 10.10 (2H, m, -NH), 10.30 – 10.45 (1H, m, -NH). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 28.0; 29.0; 32.5; 43.9; 111.4; 119.4; 124.4; 127.6; 133.4; 145.5; 168.4; 168.5; 170.3.

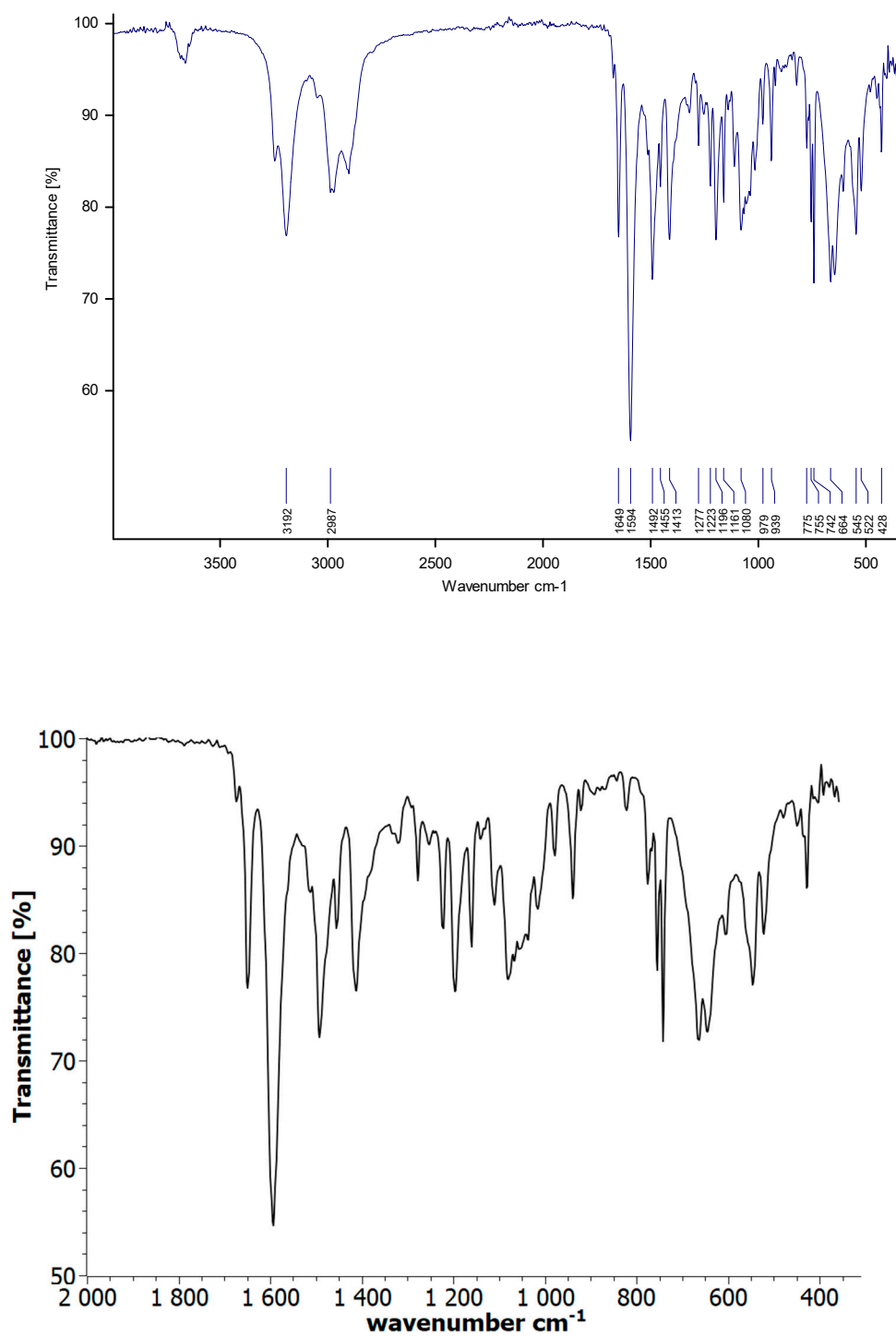


Figure S92: IR spectrum view of 2-[3-(1*H*-benzotriazol-1-yl)propanoyl]hydrazinyl}-*N*-hydroxy-4-oxobutanamide (**2n**)

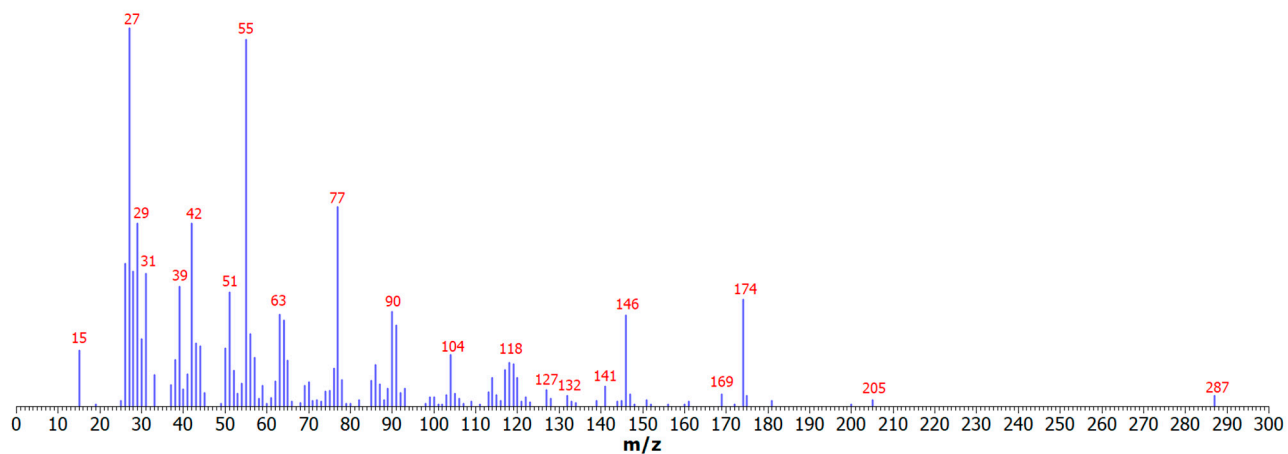


Figure S93: Mass spectrum view of 2-[3-(1*H*-benzotriazol-1-yl)propanoyl]hydrazinyl}-*N*-hydroxy-4-oxobutanamide (**2n**)

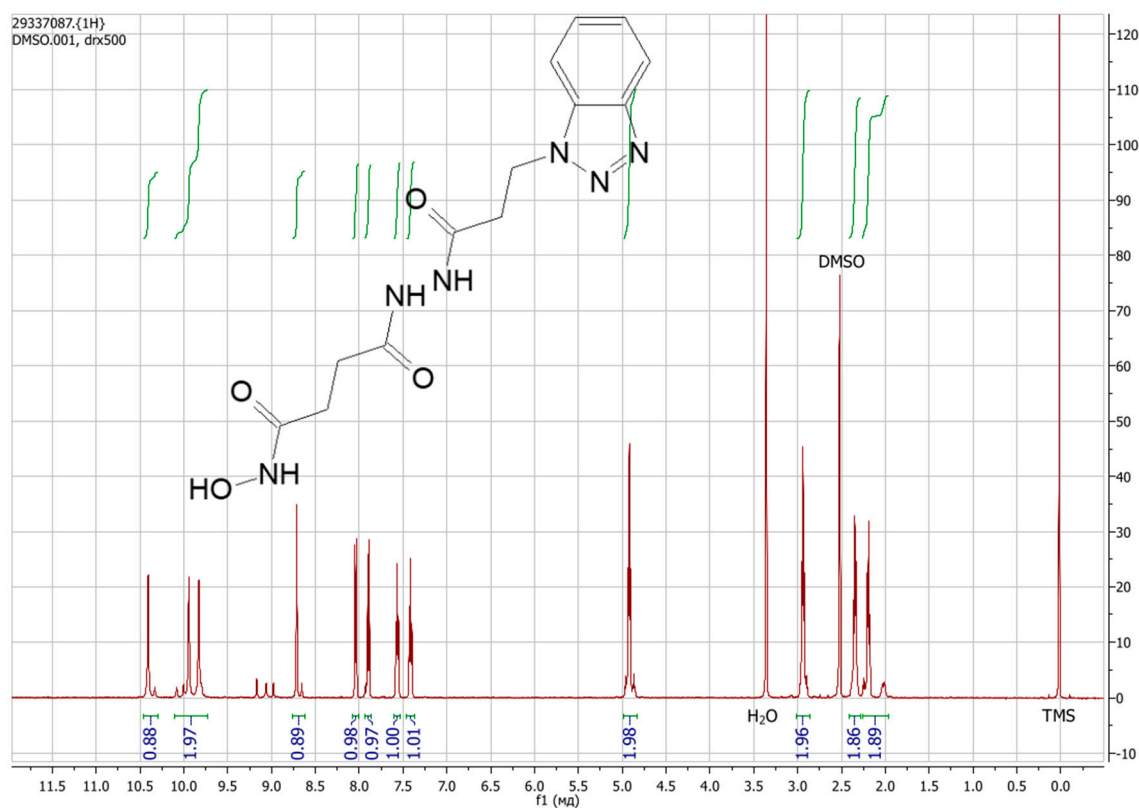


Figure S94: ^1H NMR spectrum view of 2-[3-(1*H*-benzotriazol-1-yl)propanoyl]hydrazinyl}-*N*-hydroxy-4-oxobutanamide (DMSO- d_6) (**2n**) (the additional signals are related to *cis-trans* isomerisation [24])

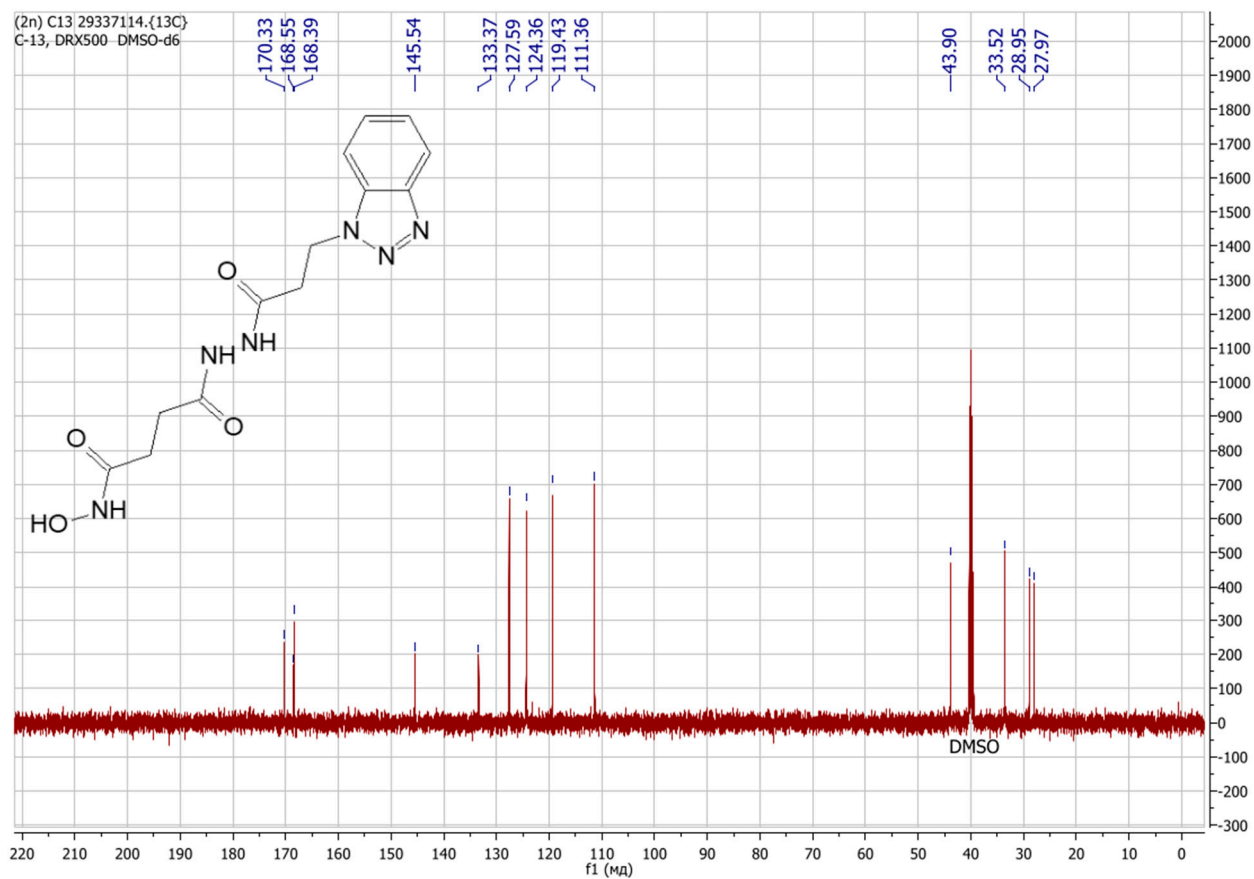
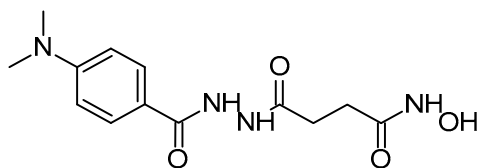


Figure S95: ^{13}C NMR spectrum view of 2-[3-(1H-benzotriazol-1-yl)propanoyl]hydrazinyl-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2n**)

4-{2-[4-(dimethylamino)benzoyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (2o)



Yield 1.01 g (86%), colorless crystals (the amount of starting *N*-substituted succinimide 1.0 g). Found, %: C 52.99; H 6.27; N 19.01; O 21.84. C₁₃H₁₈N₄O₄. Calculated, %: C 53.05; H 6.16; N 19.04; O 21.75. IR spectrum, ν , cm⁻¹: 3676, 3250, 2988, 2972, 2901, 1678, 1620, 1573, 1558, 1541, 1522, 1406, 1382, 1320, 1276, 1235, 1207, 1066, 897, 826, 756, 669, 614, 570, 527, 505, 443, 420, 398, 378. ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.10 – 2.48 (4H, m, -CH₂-), 2.92 – 3.04 (6H, m, -CH₃), 6.65 – 6.77 (2H, m, Ar-H), 7.66 – 7.81 (2H, s, Ar-H), 8.59 – 8.81 (1H, m, O-H), 9.60 – 10.05 (2H, m, N-H), 10.15 – 10.55 (1H, m, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 27.6; 28.7; 39.5; 110.7; 118.8; 128.7; 152.3; 165.3; 168.1; 170.7.

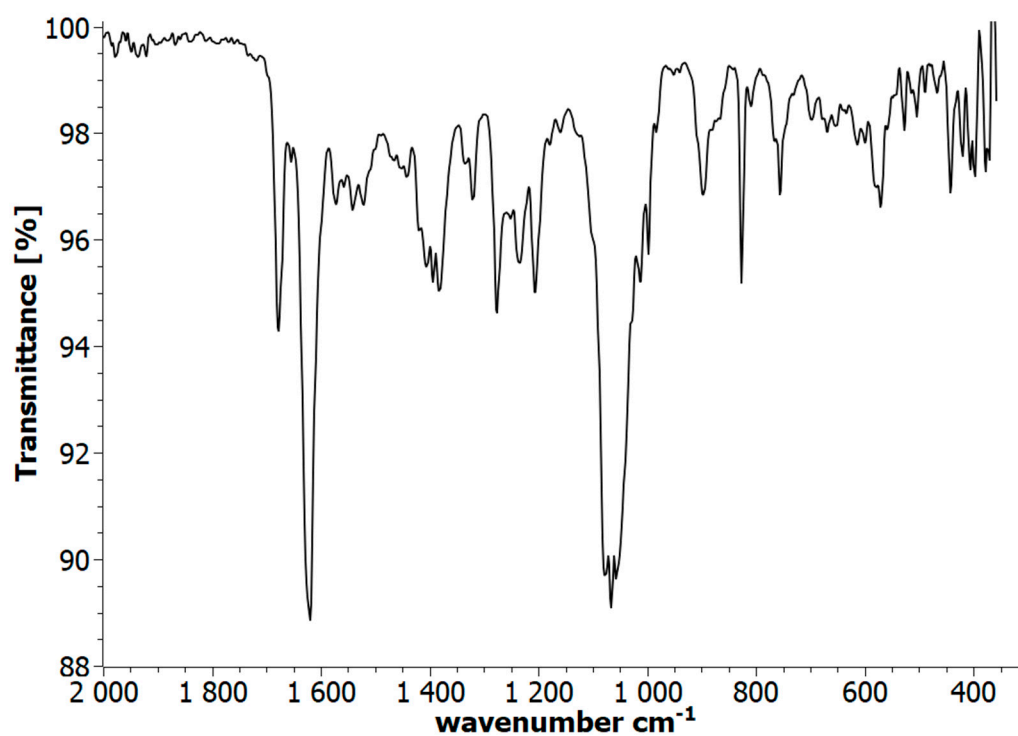
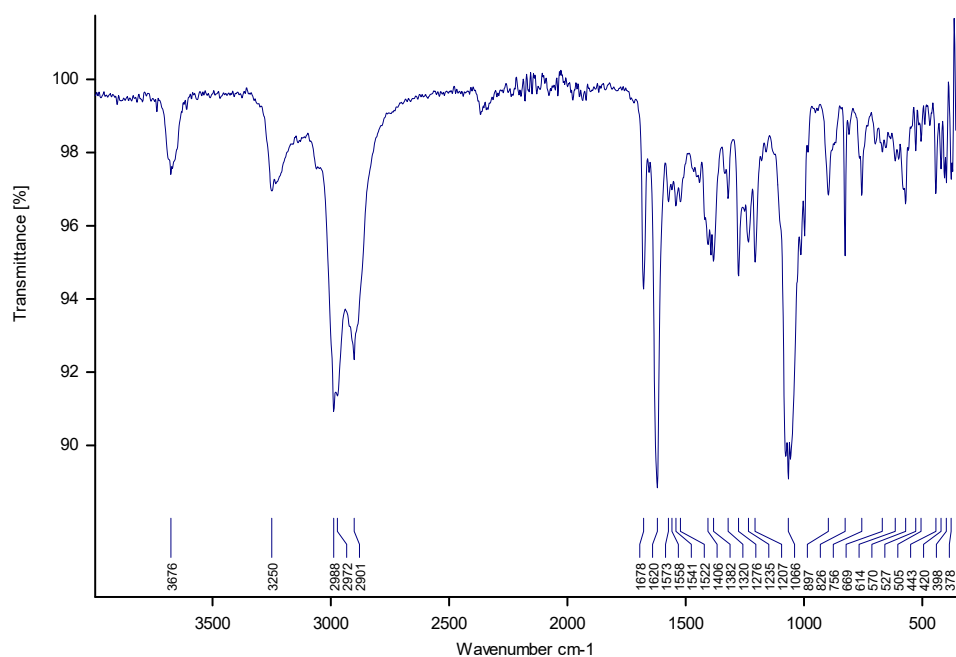


Figure S96: IR spectrum view of 4-{2-[4-(dimethylamino)benzoyl]hydrazinyl}-*N*-hydroxy-4-oxobutanamide (**2o**)

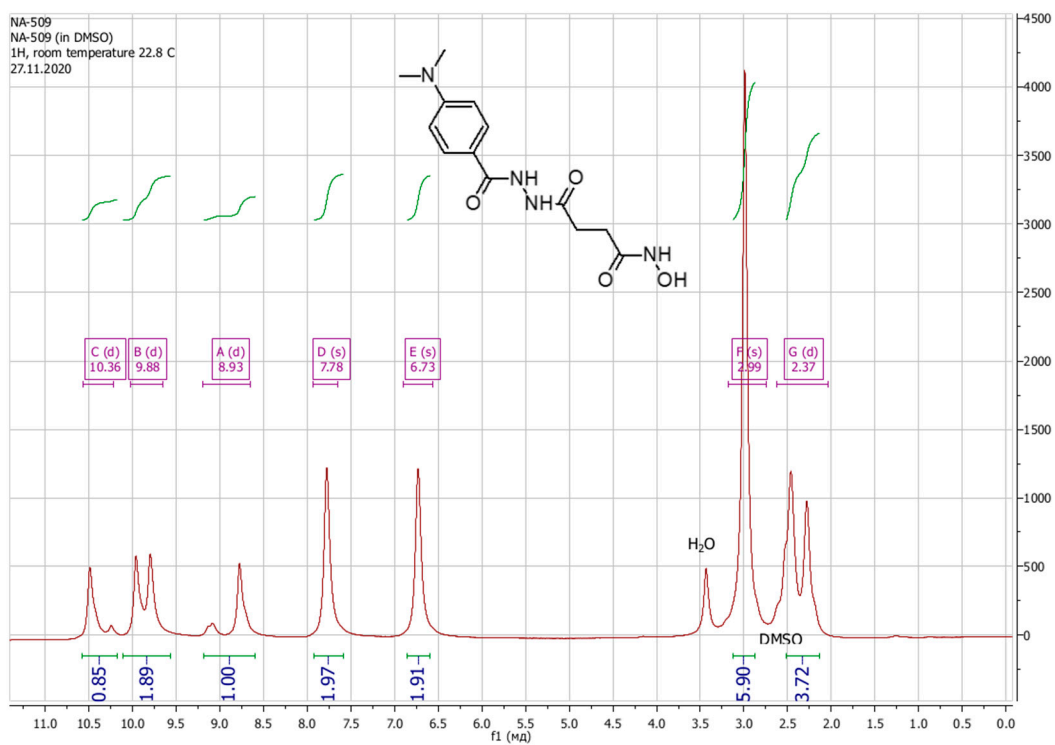


Figure S97: ¹H NMR spectrum view of 4-{2-[4-(dimethylamino)benzoyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (DMSO-*d*₆) (**2o**) (acquired on a Bruker DRX-500)

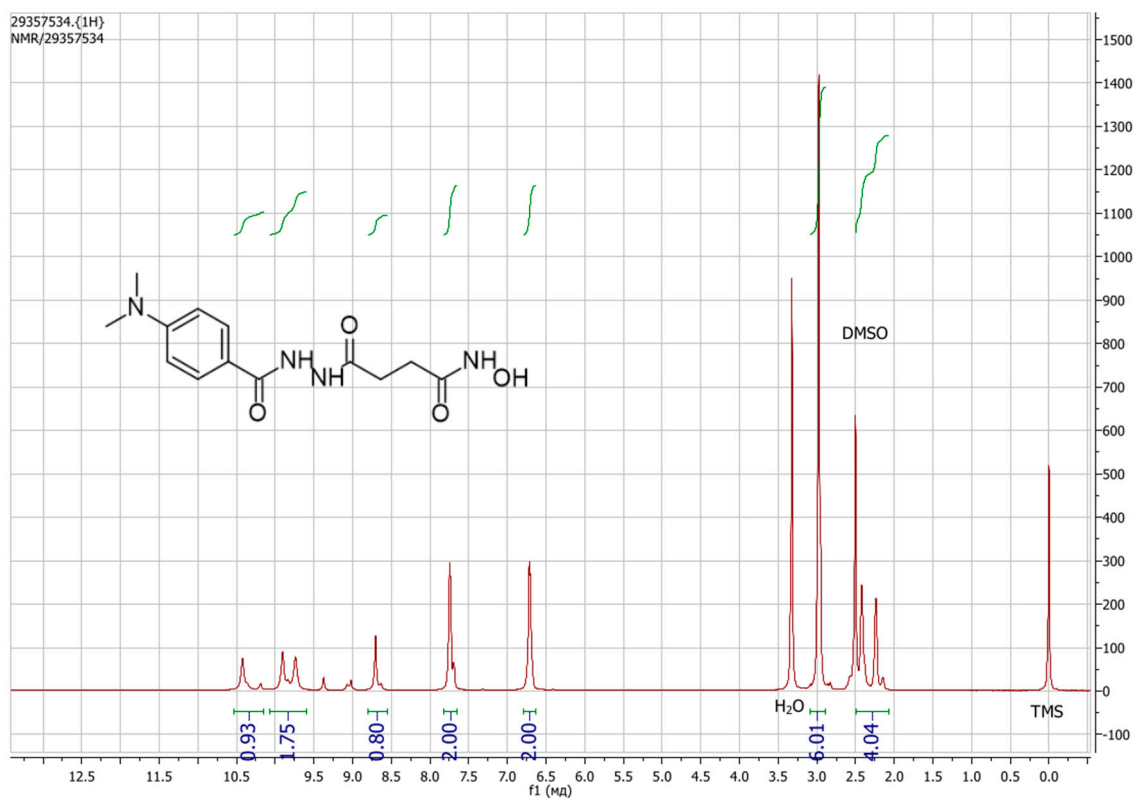


Figure S98: ¹H NMR spectrum view of 4-[2-[4-(dimethylamino)benzoyl]hydrazinyl]-N-hydroxy-4-oxobutanamide (DMSO-*d*₆) (**2o**) (acquired on a Bruker DRX-600) (the additional signals are related to *cis-trans* isomerisation [24])

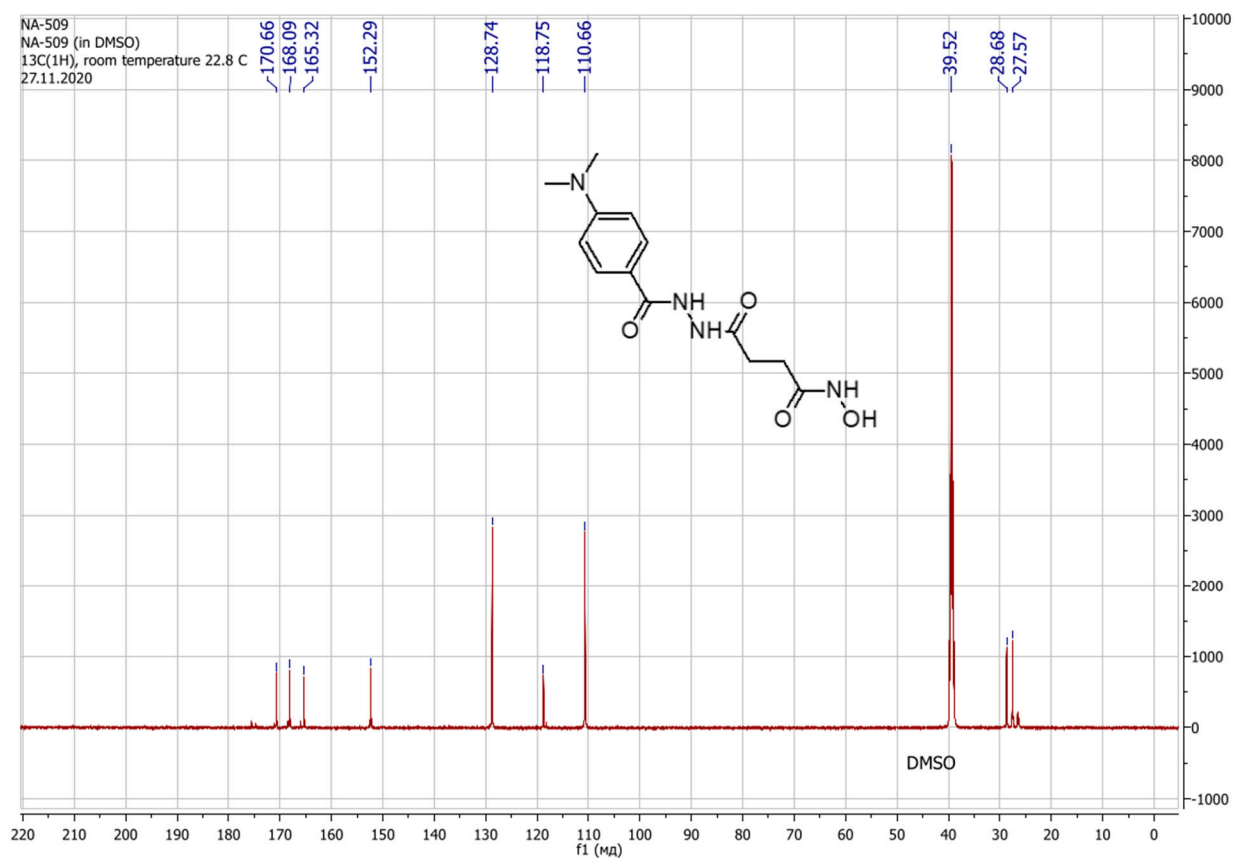
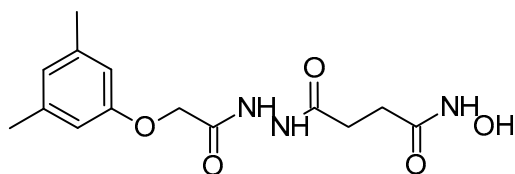


Figure S99: ^{13}C NMR spectrum view of 4-{2-[4-(dimethylamino)benzoyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2o**)

4-{2-[(3,5-dimethylphenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (2p)



Yield 0.99 g (80%), colorless crystals (the amount of starting *N*-substituted succinimide 1.1 g). Found, %: C 54.39; H 6.25; N 13.61; O 25.92. C₁₄H₁₉N₃O₅. Calculated, %: C 54.36; H 6.19; N 13.58; O 25.86. IR spectrum, ν , cm⁻¹: 3676, 3238, 2988, 2914, 1689, 1656, 1613, 1561, 1516, 1471, 1422, 1394, 1350, 1297, 1264, 1221, 1162, 1149, 1071, 1019, 997, 899, 848, 789, 755, 702, 678, 625, 598, 552, 480, 434, 407, 375. ¹H NMR spectrum (DMSO-*d*₆), δ , ppm (*J*, Hz): 2.20 – 2.25 (8H, m, -CH₃, -CH₂-), 2.40 (2H, t, *J* = 7.6, -CH₂-), 4.51 – 4.58 (2H, m, O-CH₂-C=O), 6.59 (3H, s, Ar-H), 8.73 (1H, s, O-H), 9.88 (1H, s, N-H), 10.02 (1H, s, N-H), 10.44 (1H, s, N-H). ¹³C NMR spectrum (DMSO-*d*₆), δ , ppm: 21.1; 27.6; 28.7; 65.9; 112.5; 122.9; 138.7; 157.8; 166.8; 168.2; 170.3.

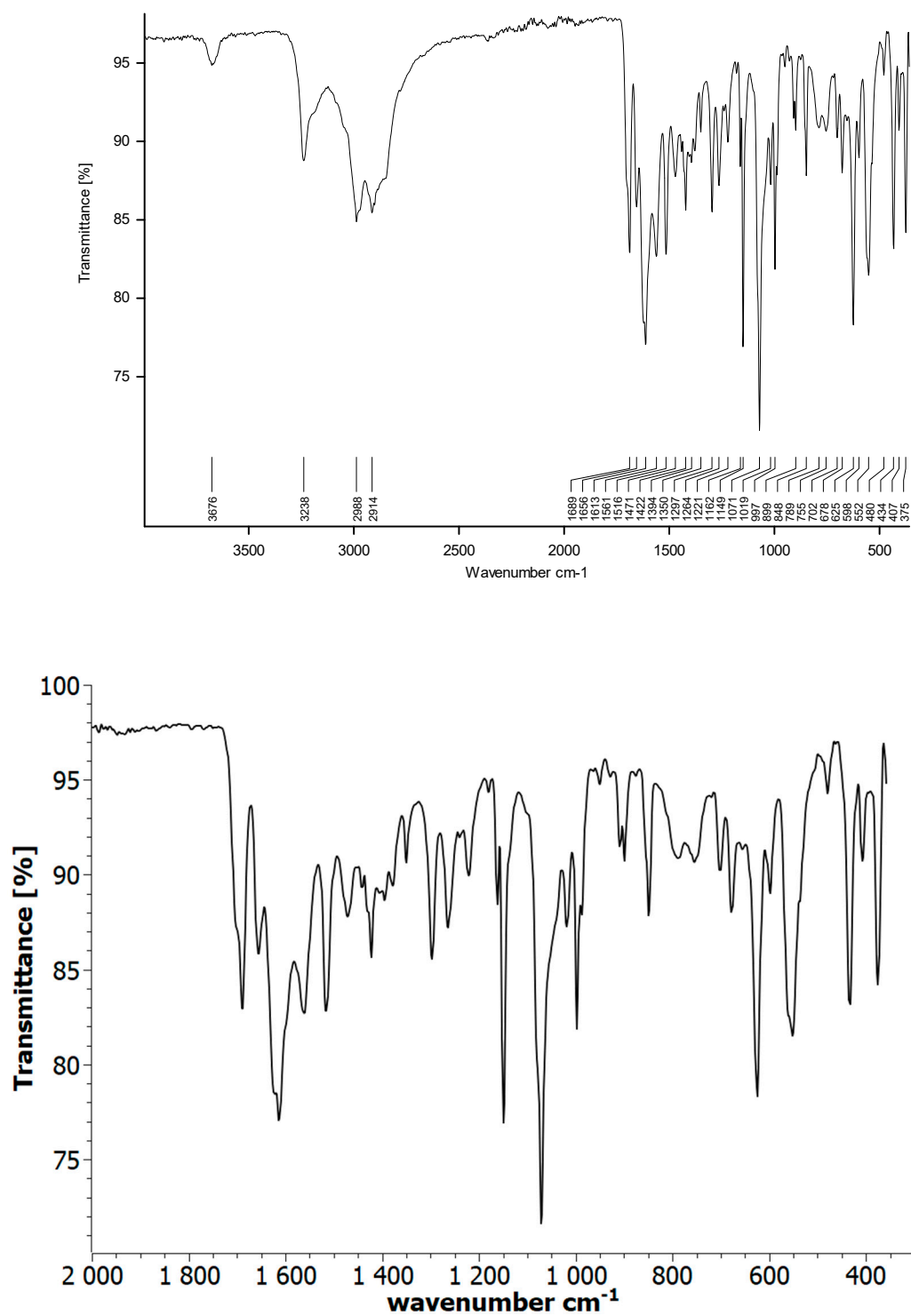


Figure S100: IR spectrum view of 4-{2-[(3,5-dimethylphenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (**2p**)

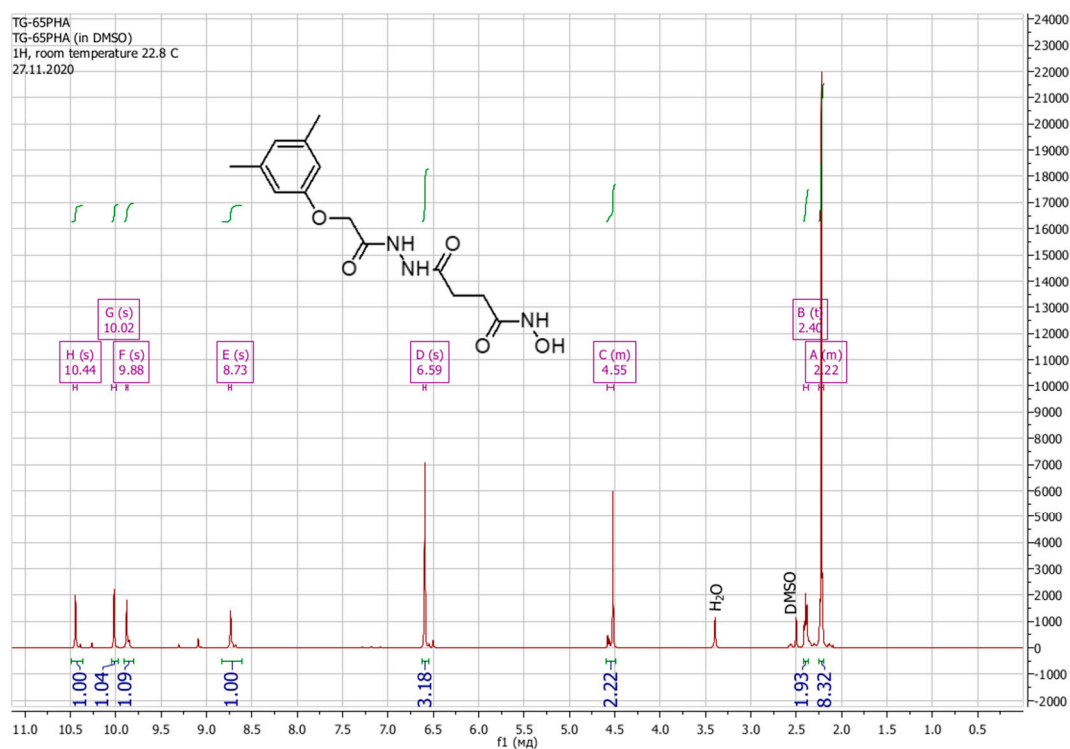


Figure S101: ^1H NMR spectrum view of 4-{2-[(3,5-dimethylphenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2p**) (the additional signals are related to *cis-trans* isomerisation [24])

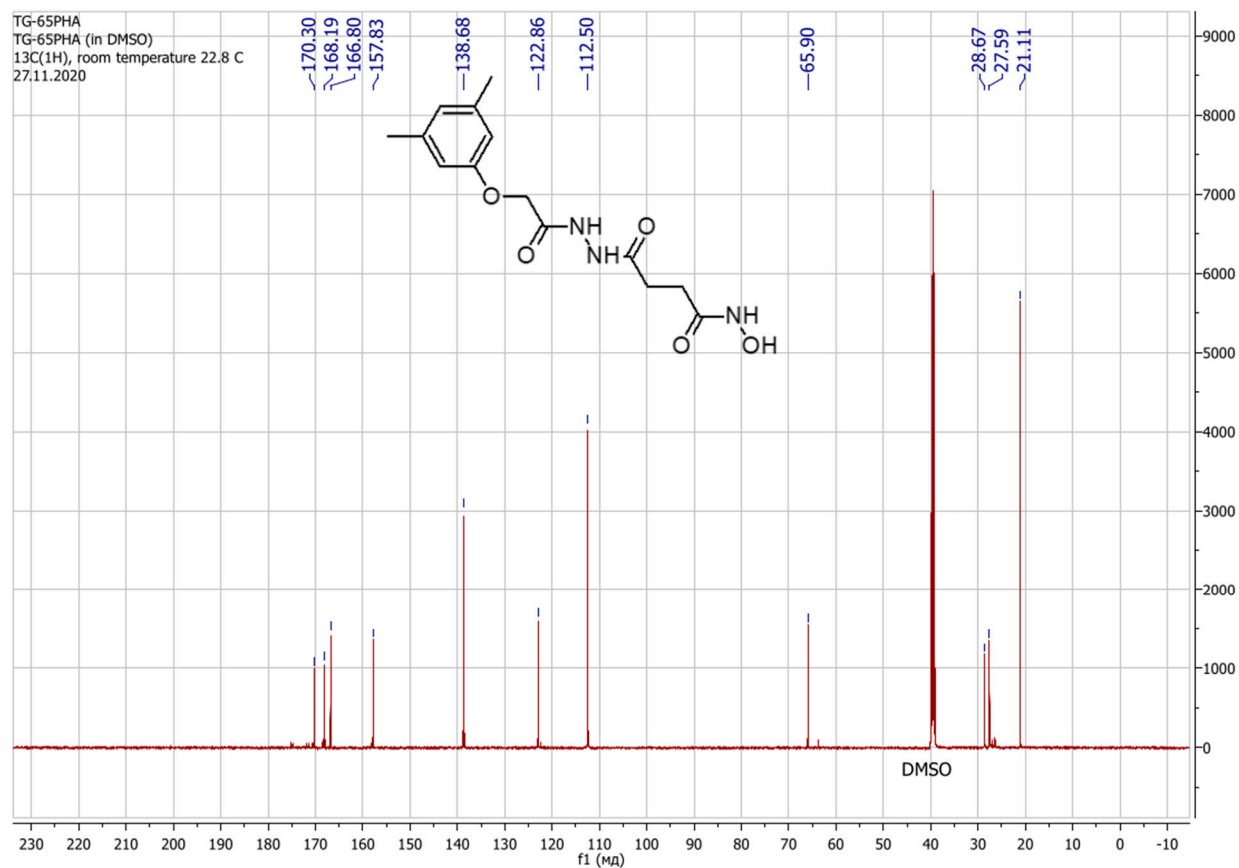


Figure S102: ^{13}C NMR spectrum view of 4-{2-[(3,5-dimethylphenoxy)acetyl]hydrazinyl}-N-hydroxy-4-oxobutanamide (DMSO- d_6) (**2p**)

2-phenyl-1H-isoindole-1,3(2H)-dione

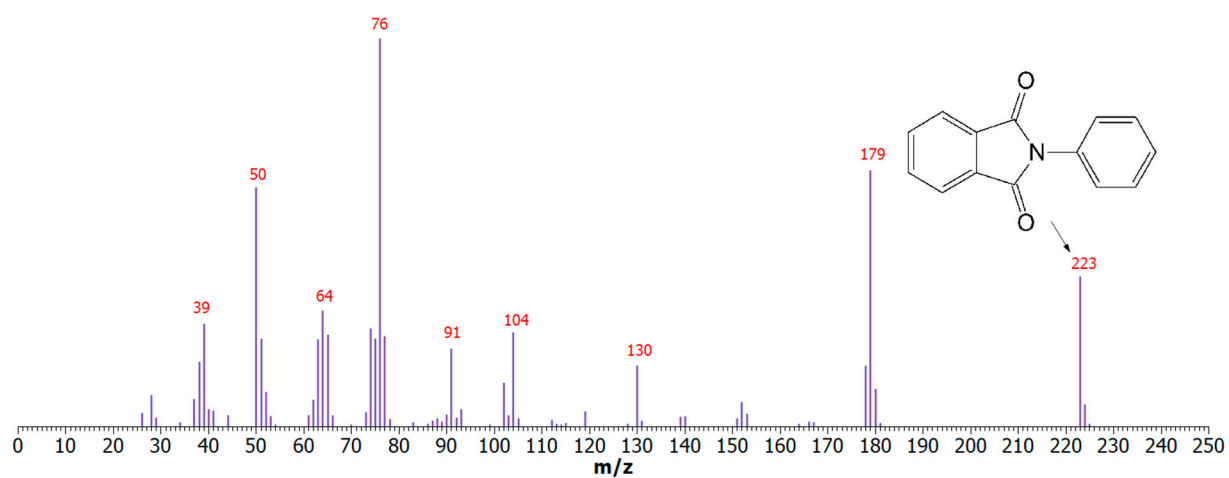


Figure S103: Mass spectrum view of 2-phenyl-1H-isoindole-1,3(2H)-dione

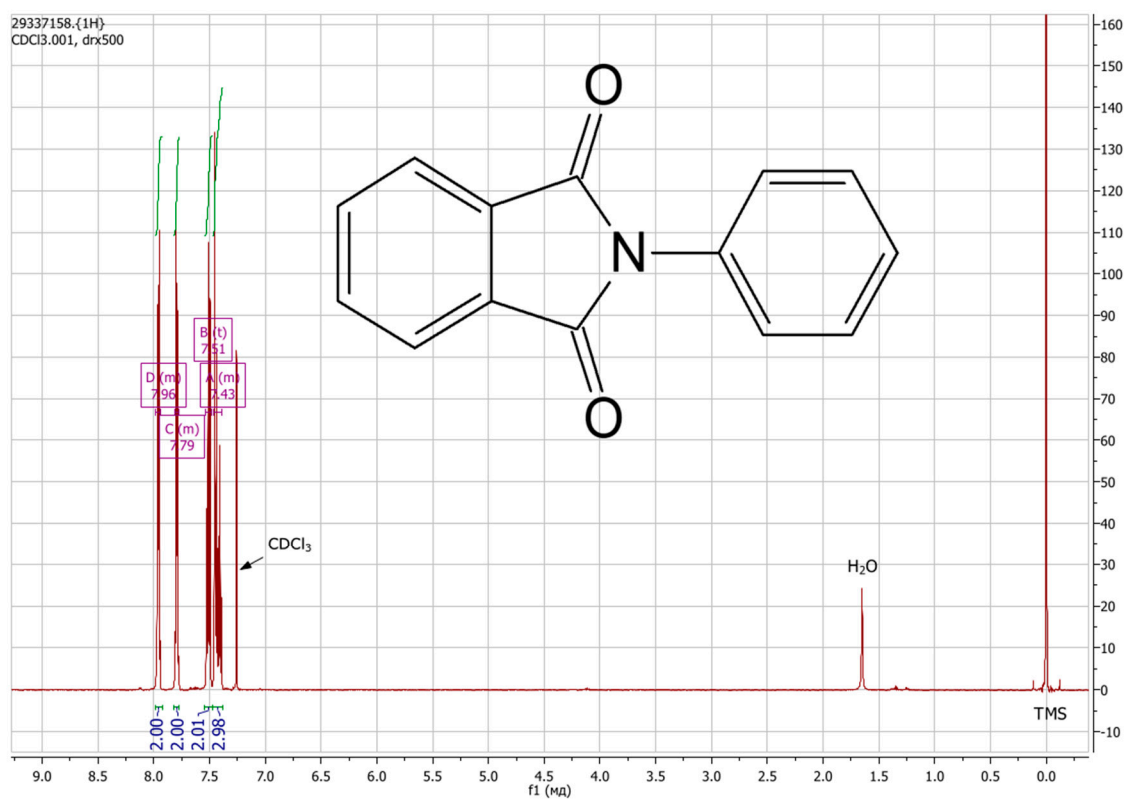


Figure S104: ¹H NMR spectrum view of 2-phenyl-1H-isoindole-1,3(2H)-dione