

**1 Analytical Data for all products**

2 **6** *N*-(2-nitro-1-phenylethyl)aniline [54]. Brown solid. m.p. 73-75°C. IR (neat KBr,  
3 cm<sup>-1</sup>):  $\nu = 3354, 3078, 3058, 3027, 2970, 2916, 2894, 1604, 1546, 1514, 1508, 1489, 1458,$   
4  $1425, 1381, 1314, 1264, 1213, 1181, 1127, 1083, 1067, 1032, 994, 940, 879, 851, 822, 756,$   
5  $727, 701, 654, 628, 533, 511.$  <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz)  $\delta$  (ppm): 4.35 (d, 1H, Ha,  $J=6.4$   
6 Hz), 4.70 (d, 2H, Hb,  $J=6.8$  Hz), 5.15 (q, 1H, Hc,  $J=6.8$  Hz), 6.60 (d, 2H, Hd,  $J_o=8.6$  Hz,  
7  $J_m=1$ Hz), 6.75 (t, 1H, He,  $J=7.4$  Hz), 7.15 (t, 2H, Hf,  $J=8.0$  Hz), 7.30 (m, 1H Hg), 7.40 (m, 4H  
8 Hh, Hi). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz)  $\delta$  (ppm): 56.7, 80.0, 113.9, 119.0, 126.5, 128.7, 129.3,  
9 129.4, 137.8, 145.7. MS (ES+)  $m/z = 242.07$  [MH<sup>+</sup>], 122.03, 94.06, 92.04, 86.98, 92.04.

10 **7a** *N*-(2-nitro-1-(*p*-tolyl)ethyl)aniline [55]. Dark-red thick oil. IR (neat NaCl, cm<sup>-1</sup>):  $\nu = 3400,$   
11  $3091, 3053, 3027, 2954, 2921, 2863, 1633, 1603, 1554, 1506, 1458, 1436, 1423, 1378, 1338,$   
12  $1316, 1266, 1214, 1182, 1157, 1113, 1068, 1031, 1021, 994, 971, 914, 872, 814, 752, 693,$   
13  $669, 510.$  <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz)  $\delta$  (ppm): 2.33 (s, 3H, Ha), 4.35 (d, 1H, Hb,  $J=6.1$  Hz),  
14 4.70 (m, 2H, Hc), 5.15 (q, 1H, Hd,  $J=6.7$  Hz), 6.61 (d, 2H, He,  $J=8.6$  Hz), 6.75 (t, 1H, Hf,  
15  $J=7.4$  Hz), 7.14 (t, 2H, Hg,  $J_o=8.0$  Hz,  $J_m=1.2$  Hz), 7.18 (d, 2H, Hh,  $J=7.9$  Hz), 7.25 (d, 2H,  
16 Hi,  $J=8.2$  Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz)  $\delta$  (ppm): 21.1, 56.5, 80.0, 113.9, 118.9, 126.4,  
17 129.4, 130.0, 134.7, 138.5, 145.8. MS (ES+)  $m/z = 257.10$  [MH<sup>+</sup>], 196.12, 164.05, 118.06,  
18 94.06, 91.07.

19 **7b** *N*-(1-(4-methoxyphenyl)-2-nitroethyl)aniline [36]. Dark-red thick oil. IR (neat NaCl, cm<sup>-1</sup>)  
20  $\nu = 3382, 3054, 3030, 3011, 2961, 2935, 2912, 2937, 1604, 1552, 1514, 1472, 1440, 1424,$   
21  $1379, 1335, 1308, 1251, 1216, 1177, 1156, 1110, 1070, 1030, 1001, 975, 917, 876, 860, 831,$   
22  $754, 692, 668, 622, 563, 542.$  <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz)  $\delta$ : 3.79 (s, 3H, Ha), 4.32 (d, 1H,  
23 Hb,  $J=7.6$  Hz), 4.69 (m, 2H, Hc), 5.11 (q, 1H, Hd,  $J=6.4$  Hz), 6.61 (d, 2H, He,  $J=8.6$  Hz),  
24 6.75 (t, 1H, Hf,  $J=7.4$  Hz), 6.90 (d, 2H, Hg,  $J=8.8$  Hz), 7.15 (t, 2H, Hh,  $J=7.8$  Hz), 7.31 (d,  
25 2H, Hi,  $J=8.6$  Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz)  $\delta$  (ppm): 55.7, 57.7, 80.1, 114.9, 115.7,  
26 126.5, 128.6, 129.3, 138.0, 139.7, 153.1. MS (ES+)  $m/z = 273.10$  [MH<sup>+</sup>], 212.14, 123.05,  
27 108.02, 104.06, 80.06.

28 **7c** *N*-(1-(4-bromophenyl)-2-nitroethyl)aniline. Dark-red thick oil. IR (neat NaCl, cm<sup>-1</sup>):  $\nu =$   
29  $3404, 3087, 3053, 3026, 2963, 2918, 1603, 1553, 1508, 1423, 1404, 1377, 1335, 1314, 1263,$   
30  $1215, 1180, 1155, 1128, 1099, 1072, 1011, 993, 902, 918, 876, 822, 752, 692, 648, 540, 509.$  <sup>1</sup>H  
31 NMR (CDCl<sub>3</sub>, 500 MHz)  $\delta$  (ppm): 4.40 (d, 1H, Ha,  $J=6.3$  Hz), 4.69 (d, 2H, Hb,  $J=6.6$  Hz),  
32 5.12 (q, 1H, Hc,  $J=6.6$  Hz), 6.58 (d, 2H, Hd,  $J=7.7$  Hz), 6.75 (t, 1H, He,  $J=7.4$  Hz), 7.15 (t,  
33 2H, Hf,  $J=7.4$  Hz), 7.28 (d, 2H, Hg,  $J=8.5$  Hz), 7.51 (d, 2H, Hh,  $J=8.5$  Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>,  
34 126 MHz)  $\delta$  (ppm): 56.1, 79.7, 113.9, 119.2, 122.6, 128.2, 129.4, 132.5, 137.8, 145.3. MS  
35 (ES+)  $m/z = 323.04$  [MH<sup>+</sup>], 262.04, 183.99, 103.02, 93.98, 77.01.

36 **7d** *N*-(2-nitro-1-(2-nitrophenyl)ethyl)aniline [56]. Yellow-brown solid. m.p. 77-79°C. IR  
37 (neat, KBr, cm<sup>-1</sup>):  $\nu = 3375, 3104, 3078, 3030, 2920, 2862, 1622, 1580, 1560, 1522, 1474,$   
38  $1435, 1386, 1340, 1289, 1263, 1250, 1215, 1182, 1154, 1131, 1086, 1066, 937, 921, 879, 860,$   
39  $851, 811, 792, 750, 724, 708, 673, 647, 627, 560, 517, 505.$  <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz)  $\delta$

40 (ppm): 4.83 (m, 2H, Ha), 5.01 (dd, 1H, Hb  $J=3.7$  Hz, 12.4 Hz), 5.80 (m, 1H, Hc), 6.48 (d, 2H,  
41 Hd,  $J_o=8.6$  Hz,  $J_m=1.0$  Hz), 6.75 (t, 1H, He,  $J_o=7.4$  Hz,  $J_m=1.0$  Hz), 7.10 (t, 2H, Hf,  $J=8.0$  Hz),  
42 7.50 (t, 1H, Hg,  $J_o=8.1$  Hz,  $J_m=1.4$  Hz), 7.60 (t, 1H, Hh,  $J_o=7.5$  Hz,  $J_m=1.2$  Hz), 7.69 (d, 1H,  
43 Hi,  $J_o=7.9$  Hz,  $J_m=1.3$  Hz), 8.09 (d, 1H, Hj,  $J_o=8.2$  Hz,  $J_m=1.2$  Hz).

44 **7e** 3-(2-Nitro-1-(phenylamino)ethyl)phenol. Dark-red oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3407$ ,  
45 3097, 3072, 3036, 2923, 2856, 1613, 1580, 1560, 1509, 1451, 1422, 1380, 1344, 1325, 1289,  
46 1273, 1257, 1215, 1186, 1154, 1138, 1083, 1066, 1028, 996, 970, 934, 918, 876, 860, 844,  
47 792, 750, 718, 692, 669, 643, 611, 518.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.38 (m, 1H,  
48 Ha), 4.69 (d, 2H, Hb,  $J=6.7$  Hz), 5.01 (broad, 1H, Hc), 5.11 (q, 1H, Hd,  $J=6.1$  Hz), 6.60 (d,  
49 2H, He,  $J=8.6$  Hz), 6.75 (t, 1H, Hf,  $J=7.4$  Hz), 6.76 (m, 1H, Hg), 6.85 (s, 1H, Hh), 6.95 (d,  
50 1H, Hi,  $J=7.6$  Hz), 7.15 (t, 2H, Hj,  $J_o=7.0$  Hz,  $J_m=1.2$  Hz), 7.25 (t, 1H, Hk,  $J=7.9$  Hz).  $^{13}\text{C}$   
51 NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 56.4, 79.9, 113.4, 113.9, 115.7, 118.6, 119.0, 129.4, 130.6,  
52 139.6, 145.6, 156.4. MS (ES+)  $m/z = 259.10$  [ $\text{MH}^+$ ], 212.17, 198.06, 166.06, 120.07, 94.05.

53 **7f** *N*-(1-(naphthalene-1-yl)-2-nitroethyl)aniline [43]. Yellow-red solid. m.p. 93-96°C. IR  
54 (neat, KBr,  $\text{cm}^{-1}$ ):  $\nu = 3389$ , 3086, 3057, 3015, 2915, 2851, 1652, 1604, 1558, 1507, 1459,  
55 1437, 1424, 1394, 1375, 1320, 1266, 1230, 1210, 1197, 1184, 1165, 1136, 1078, 1068, 1033,  
56 997, 977, 965, 936, 926, 913, 871, 807, 794, 781, 758, 700, 674, 632, 616, 590, 558, 542, 507,  
57 474, 422.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.55 (d, 1H, Ha,  $J=5.0$  Hz), 4.70 (dd, 1H, Hb,  
58  $J=9.1$  Hz, 12.4 Hz), 4.95 (dd, 1H, Hc,  $J=4.2$  Hz, 12.4 Hz), 6.00 (m, 1H, Hd), 6.57 (d, 2H, He,  
59  $J_o=8.6$  Hz,  $J_m=1.0$  Hz), 6.73 (t, 1H, Hf,  $J_o=7.4$  Hz,  $J_m=0.9$  Hz), 7.10 (t, 2H, Hg,  $J_o=8.0$  Hz,  
60  $J_m=2.0$  Hz), 7.43 (t, 1H, Hh,  $J=7.6$  Hz), 7.58 (t, 1H, Hi,  $J=7.6$  Hz), 7.66 (d, 1H, Hj,  $J=6.5$  Hz),  
61 7.66 (t, 1H, Hk,  $J=7.6$  Hz), 7.85 (d, 1H, Hl,  $J=8.2$  Hz), 7.95 (d, 1H, Hm,  $J=8.2$  Hz), 8.20 (d,  
62 1H, Hn,  $J=8.5$  Hz). MS (ES+)  $m/z = 293.10$  [ $\text{MH}^+$ ], 200.07, 198.07, 154.02, 119.03, 93.99.

63 **7g** *N*-(1-([1,1-biphenyl]-4-yl)-2-nitroethyl)aniline. Yellow-red solid. m.p. 97-99°C. IR (neat,  
64 KBr,  $\text{cm}^{-1}$ ):  $\nu = 3398$ , 3055, 3030, 2960, 2918, 1603, 1549, 1511, 1486, 1476, 1460, 1441,  
65 1422, 1381, 1314, 1266, 1257, 1213, 1180, 1155, 1133, 1076, 1008, 993, 920, 876, 837, 768,  
66 755, 732, 695, 650, 621, 561, 507.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.42 (d, 1H, Ha,  
67  $J=6.4$  Hz), 4.75 (d, 2H, Hb,  $J=6.8$  Hz), 5.22 (q, 1H, Hc,  $J=6.6$  Hz), 6.65 (d, 2H, Hd,  $J_o=8.6$   
68 Hz,  $J_m=1.0$  Hz), 6.75 (t, 1H, He,  $J_o=7.4$  Hz,  $J_m=1.0$  Hz), 7.16 (t, 2H, Hf,  $J_o=8.0$  Hz,  $J_m=1.2$   
69 Hz), 7.35 (t, 1H, Hg,  $J_o=7.4$  Hz,  $J_m=1.3$  Hz), 7.43 (t, 2H, Hh,  $J=7.6$  Hz), 7.47 (d, 2H, Hi,  
70  $J_o=8.1$  Hz,  $J_m=1.6$  Hz), 7.55 (d, 2H, Hj,  $J_o=8.2$  Hz,  $J_m=2.0$  Hz), 7.60 (d, 2H, Hk,  $J_o=8.4$  Hz,  
71  $J_m=2.0$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 56.5, 79.9, 114.0, 119.0, 126.9, 127.1,  
72 127.6, 128.0, 128.9, 129.4, 136.7, 140.3, 141.7, 145.7. MS (ES+)  $m/z = 327.03$  [ $\text{MH}^+$ ], 80.91.

73 **7h** *N*-(1-(3,4-dichlorophenyl)-2-nitroethyl)aniline. Dark-red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu$   
74 = 3403, 3093, 3054, 3025, 2960, 2922, 2857, 1604, 1556, 1508, 1472, 1423, 1378, 1313,  
75 1262, 1214, 1194, 1181, 1136, 1075, 1033, 997, 929, 884, 826, 752, 697, 668, 619, 584.  $^1\text{H}$   
76 NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.43 (broad, 1H, Ha), 4.68 (d, 2H, Hb,  $J=6.9$  Hz), 5.11 (q,  
77 1H, Hc,  $J=6.0$  Hz), 6.57 (d, 2H, Hd,  $J_o=9.1$  Hz,  $J_m=0.95$  Hz), 6.78 (t, 1H, He,  $J_o=7.4$  Hz,  
78  $J_m=1.0$  Hz), 7.15 (t, 2H, Hf,  $J=8.0$  Hz), 7.25 (d, 1H, Hg,  $J=9.3$  Hz), 7.45 (d, 1H, Hh,  $J=8.2$

79 Hz), 7.51 (s, 1H, Hi). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 55.8, 79.6, 114.0, 119.5, 125.8,  
80 128.6, 129.5, 131.6, 132.9, 133.6, 138.1, 145.1. MS (ES+) m/z = 312.97 [MH<sup>+</sup>], 252.96,  
81 252.02, 173.91, 101.73, 93.98.

82 **7i** *N*-(1-(2,6-dichlorophenyl)-2-nitroethyl)aniline. Red solid. m.p. 96-99°C. IR (neat, KBr, cm<sup>-1</sup>):  
83 ν = 3388, 3061, 3049, 3033, 2982, 2928, 2855, 1603, 1581, 1555, 1508, 1495, 1457, 1441,  
84 1381, 1339, 1311, 1289, 1266, 1250, 1216, 1200, 1181, 1152, 1123, 1089, 1056, 1028, 993,  
85 923, 901, 885, 860, 834, 793, 774, 758, 726, 695, 640, 621, 558, 495. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500  
86 MHz) δ (ppm): 4.73 (dd, 1H, Ha, J=5.2 Hz, 12.3 Hz), 4.95 (d, 1H, Hb, 11.2 Hz), 5.07 (dd, 1H,  
87 Hc, 9.9 Hz, 12.3 Hz), 6.29 (ddd, 1H, Hd, 11.2 Hz, 10.0 Hz, 5.3 Hz), 6.74 (m, 3H, He, Hf),  
88 7.13-7.19 (m, 3H, Hg, Hh), 7.27-7.38 (m, 2H, Hi). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm):  
89 53.3, 76.5, 114.2, 119.4, 129.4, 130.2, 132.2, 145.3. MS (ES+) m/z = 310.97 [MH<sup>+</sup>], 250.02,  
90 136.98, 124.95, 93.33.

91 **7j** *N*-(1-(benzo[*d*][1,3]dioxol-5-yl)-2-nitroethyl)aniline. Red thick oil. IR (neat NaCl, cm<sup>-1</sup>): ν  
92 = 3393, 3051, 3028, 2960, 2896, 1607, 1559, 1508, 1491, 1449, 1378, 1339, 1313, 1246,  
93 1184, 1155, 1110, 1036, 997, 971, 929, 871, 816, 755, 733, 693, 668, 639. <sup>1</sup>H NMR (CDCl<sub>3</sub>,  
94 500 MHz) δ (ppm): 4.35 (broad, 1H, Ha), 4.66 (d, 2H, Hb, J=6.7 Hz), 5.07 (q, 1H, Hc, J=6.0  
95 Hz), 5.96 (m, 2H, Hd), 6.61 (d, 2H, He, J<sub>o</sub>=8.6 Hz, J<sub>m</sub>=1.0 Hz), 6.75 (t, 1H, Hf, J=7.3 Hz),  
96 6.79 (d, 1H, Hg, J=8.6 Hz), 6.87 (m, 2H, Hh, Hi), 7.15 (t, 2H, Hj, J<sub>o</sub>=7.4 Hz, J<sub>m</sub>=2.0 Hz). <sup>13</sup>C  
97 NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 56.5, 80.2, 101.4, 106.7, 108.9, 113.9, 119.0, 120.0, 129.4,  
98 131.6, 145.6, 147.9, 148.5. MS (ES+) m/z = 287.10 [MH<sup>+</sup>], 194.02, 148.03, 94.05, 91.64,  
99 90.99.

100 **7k** *N*-(1-nitropentan-2-yl)aniline. Red oil. IR (neat NaCl, cm<sup>-1</sup>): ν = 3367, 3055, 3017, 2965,  
101 2931, 2875, 1684, 1604, 1555, 1500, 1463, 1445, 1383, 1362, 1317, 1258, 1220, 1185, 1140,  
102 1075, 1047, 994, 922, 839, 756, 692, 669. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 0.95 (t, 3H,  
103 Ha, J= 7.3 Hz), 1.40-1.70 (m, 4H, Hb, Hc), 3.65 (d, 1H, Hd, J=7.2 Hz), 4.10 (m, 1H, He),  
104 4.40 (dd, 1H, Hf, J=6.2 Hz, 11.8 Hz), 4.50 (dd, 1H, Hg, J=5.1 Hz, 11.8 Hz), 6.65 (d, 2H, Hh,  
105 J<sub>o</sub>=8.6 Hz, J<sub>m</sub>=0.9 Hz), 6.75 (t, 1H, Hi, J<sub>o</sub>=7.4 Hz, J<sub>m</sub>=0.9 Hz), 7.20 (t, 2H, Hj, J<sub>o</sub>=8.0 Hz,  
106 J<sub>m</sub>=1.2 Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 13.8, 19.1, 35.1, 52.0, 78.1, 113.5, 118.7,  
107 129.6, 146.0. MS (ES+) m/z = 209.10 [MH<sup>+</sup>], 148.11, 118.25, 106.02, 93.08, 40.98.

108 **7l** *N*-(1-cyclohexyl-2-nitroethyl)aniline. Red oil. (neat NaCl, cm<sup>-1</sup>): ν = 3399, 3053, 3022,  
109 2930, 2853, 1601, 1557, 1504, 1449, 1427, 1381, 1348, 1315, 1256, 1215, 1180, 1155, 1123,  
110 1072, 1030, 993, 964, 914, 893, 874, 841, 752, 692, 667, 619, 509. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500  
111 MHz) δ: 1.00-1.30 (m, 5H, Ha, Hb, Hc), 1.55-1.85 (m, 5H, Hd, He, Hf), 1.91 (d, 1H, Hg,  
112 J=12.5 Hz), 3.70 (d, 1H, Hh, J= 9.8 Hz), 3.94-4.00 (m, 1H, Hi), 4.45 (dd, 1H, Hj J=6.3 Hz,  
113 12.1 Hz), 4.55 (dd, 1H, Hk, J=5.7 Hz, 12.1 Hz), 6.65 (d, 2H, Hl, J=7.7 Hz), 6.75 (t, 1H, Hm,  
114 J=7.3 Hz), 7.2 (t, 2H, Hn, J<sub>o</sub>=7.9 Hz, J<sub>m</sub>=1.0 Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 26.0,  
115 26.1, 28.3, 29.6, 40.6, 57.0, 76.5, 113.5, 118.4, 129.5, 146.6. MS (ES+) m/z = 249.14 [MH<sup>+</sup>],  
116 188.17, 109.08, 106.02, 94.71, 67.06.

117 **7m** Ethyl 3-nitro-2-(phenylamino)propanoate. Red oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3388, 3054,$   
118  $3028, 2983, 2936, 2905, 2870, 1742, 1605, 1558, 1507, 1447, 1421, 1380, 1313, 1281, 1256,$   
119  $1215, 1158, 1100, 1078, 1053, 1018, 958, 922, 875, 856, 757, 693.$   $^1\text{H}$  NMR ( $\text{CDCl}_3, 500$   
120 MHz)  $\delta$  (ppm): 1.29 (t, 3H, Ha,  $J=7.1$  Hz), 4.29 (m, 2H, Hb), 4.51 (d, 1H, Hc,  $J=7.7$  Hz), 4.64  
121 (m, 1H, Hd), 4.79 (dd, 1H, He,  $J=5.0$  Hz, 13.7 Hz), 4.87 (dd, 1H, Hf,  $J=4.5$  Hz, 13.7 Hz),  
122 6.68 (d, 2H, Hg,  $J=7.7$  Hz), 6.84 (t, 1H, Hh,  $J=7.4$  Hz), 7.22 (t, 2H, Hi,  $J_o=8.0$  Hz,  $J_m=1.9$   
123 Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3, 126$  MHz)  $\delta$  (ppm): 14.0, 54.9, 62.7, 75.6, 113.8, 119.7, 129.6, 145.2,  
124 169.5. MS (ES+)  $m/z = 239.10$  [ $\text{MH}^+$ ], 178.11, 150.07, 104.02, 93.02, 77.02.

125 **8a** 4-Methoxy-*N*-(2-nitro-1-phenylethyl)aniline [54,57]. Dark red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  
126  $\nu = 3366, 3062, 3031, 3002, 2954, 2933, 2916, 2834, 1559, 1513, 1456, 1423, 1377, 1339,$   
127  $1292, 1265, 1241, 1182, 1132, 1106, 1077, 1034, 1002, 973, 922, 824, 760, 701, 667, 616,$   
128  $536, 515.$   $^1\text{H}$  NMR ( $\text{CDCl}_3, 500$  MHz)  $\delta$  (ppm): 3.70 (s, 1H, Ha), 4.70 (d, 2H, Hb,  $J=6.8$  Hz),  
129 5.09 (t, 1H, Hc,  $J=6.7$  Hz), 6.58 (d, 2H, Hd,  $J=9.0$  Hz), 6.73 (d, 2H, He,  $J=9.0$  Hz), 7.30-7.34  
130 (m, 1H, Hf), 7.36-7.40 (m, 4H, Hg, Hh).

131 **8b** 4-Methyl-*N*-(2-nitro-1-phenylethyl)aniline [43]. Yellow solid. m.p. 78-80°C. IR (neat,  
132 KBr,  $\text{cm}^{-1}$ ):  $\nu = 3354, 3090, 3067, 3034, 3018, 2967, 2918, 2870, 1620, 1549, 1520, 1494,$   
133  $1459, 1433, 1381, 1352, 1320, 1304, 1256, 1213, 1184, 1159, 1136, 1114, 1084, 1029, 1004,$   
134  $939, 858, 813, 768, 723, 707, 649, 616, 571, 515, 478, 455.$   $^1\text{H}$  NMR ( $\text{CDCl}_3, 500$  MHz)  $\delta$   
135 (ppm): 2.20 (s, 3H, Ha), 4.25 (d, 1H, Hb,  $J=5.5$  Hz), 4.70 (d, 2H, Hc,  $J=6.7$  Hz), 5.15 (q, 1H,  
136 Hd,  $J=6.6$  Hz), 6.53 (d, 2H, He,  $J=8.5$  Hz), 6.95 (d, 2H, Hf,  $J_o=8.5$  Hz,  $J_m=0.6$  Hz), 7.30-7.33  
137 (m, 1H, Hg), 7.35-7.40 (m, 4H, Hh, Hi).

138 **8c** 3-Methyl-*N*-(2-nitro-1-phenylethyl)aniline. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3396,$   
139  $3027, 2949, 2919, 2859, 1608, 1591, 1558, 1508, 1491, 1453, 1424, 1380, 1339, 1323, 1269,$   
140  $1215, 1178, 1126, 1078, 1032, 998, 970, 926, 847, 768, 699, 668, 624, 592, 527.$   $^1\text{H}$  NMR  
141 ( $\text{CDCl}_3, 500$  MHz)  $\delta$  (ppm): 2.24 (s, 3H, Ha), 4.31 (d, 1H, Hb,  $J=6.4$  Hz), 4.71 (d, 2H, Hc,  
142  $J=6.8$  Hz), 5.17 (q, 1H, Hd,  $J=6.7$  Hz), 6.41 (d, 1H, He,  $J_o=8.0$  Hz,  $J_m=2.2$  Hz), 6.46 (s, 1H,  
143 Hf), 6.58 (d, 1H, Hg,  $J=7.5$  Hz), 7.03 (t, 1H, Hh,  $J=7.8$  Hz), 7.31-7.34 (m, 1H, Hi), 7.35-7.41  
144 (m, 4H, Hj, Hk).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3, 126$  MHz)  $\delta$  (ppm): 21.5, 56.6, 79.9, 110.9, 114.8, 119.9,  
145 126.4, 128.6, 129.2, 129.3, 137.8, 139.2, 145.7. MS (ES+)  $m/z = 257.08$  [ $\text{MH}^+$ ], 196.11,  
146 149.99, 107.98, 104.07, 78.05.

147 **8d** 2-Methyl-*N*-(2-nitro-1-phenylethyl)aniline. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3417,$   
148  $3058, 3024, 2967, 2915, 2853, 1636, 1608, 1588, 1554, 1508, 1481, 1455, 1423, 1377, 1345,$   
149  $1313, 1263, 1216, 1189, 1160, 1136, 1074, 1053, 1030, 1003, 987, 968, 923, 844, 751, 701,$   
150  $653, 621, 592, 536.$   $^1\text{H}$  NMR ( $\text{CDCl}_3, 500$  MHz)  $\delta$  (ppm): 2.23 (s, 3H, Ha), 4.35 (d, 1H, Hb,  
151  $J=5.5$  Hz), 4.75 (d, 2H, Hc,  $J=6.7$  Hz), 5.19 (q, 1H, Hd,  $J=6.4$  Hz), 6.46 (d, 1H, He,  $J=8.0$   
152 Hz), 6.69 (t, 1H, Hf,  $J_o=7.3$  Hz,  $J_m=0.8$  Hz), 7.00 (t, 1H, Hg,  $J_o=7.5$  Hz,  $J_m=1.0$  Hz), 7.08 (d,  
153 1H, Hh,  $J=7.4$  Hz), 7.31-7.34 (m, 1H, Hi), 7.36-7.42 (m, 4H, Hj, Hk).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3, 126$   
154 MHz)  $\delta$  (ppm): 17.5, 56.8, 80.3, 111.2, 118.5, 123.0, 126.4, 127.1, 128.7, 129.4, 130.4, 137.9,  
155 143.7. MS (ES+)  $m/z = 257.08$  [ $\text{MH}^+$ ], 196.11, 149.99, 107.98, 104.07, 77.99.

156 **8e** 4-Ethyl-*N*-(2-nitro-1-phenylethyl)aniline. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3400$ ,  
157 3062, 3027, 2962, 2928, 2889, 2870, 1615, 1557, 1521, 1494, 1452, 1426, 1414, 1377, 1343,  
158 1313, 1265, 1212, 1184, 1134, 1113, 1076, 1029, 1000, 968, 921, 826, 767, 700, 644, 628,  
159 540.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 1.15 (t, 3H, Ha,  $J=7.6$  Hz), 2.50 (q, 2H, Hb,  $J=7.6$   
160 Hz), 4.27 (broad, 1H, Hc), 4.70 (d, 2H, Hd,  $J=6.8$  Hz), 5.14 (broad, 1H, He), 6.55 (d, 2H, Hf,  
161  $J=8.5$  Hz), 6.98 (d, 2H, Hg,  $J=8.5$  Hz), 7.32 (m, 1H, Hh), 7.36-7.41 (m, 4H, Hi, Hj).  $^{13}\text{C}$  NMR  
162 ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 15.8, 27.9, 57.0, 80.0, 114.1, 126.5, 128.6, 128.7, 129.3, 134.8,  
163 138.0, 143.6. MS (ES+)  $m/z = 271.08$  [ $\text{MH}^+$ ], 210.11, 121.37, 104.01, 103.69, 78.06.

164 **8f** 4-Bromo-*N*-(2-nitro-1-phenylethyl)aniline [55]. Dark-red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu$   
165 = 3404, 3063, 3031, 3005, 2971, 2915, 1596, 1556, 1493, 1455, 1426, 1398, 1380, 1339,  
166 1317, 1294, 1260, 1211, 1182, 1129, 1113, 1076, 1027, 1003, 970, 922, 816, 763, 701, 669,  
167 636, 604, 534, 501.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.45 (d, 1H, Ha,  $J=6.5$  Hz), 4.70  
168 (m, 2H, Hb), 5.11 (q, 1H, Hc,  $J=6.9$  Hz), 6.48 (d, 2H, Hd,  $J=8.9$  Hz), 7.21 (d, 2H, He,  $J=8.9$   
169 Hz), 7.31-7.41 (m, Hf, Hg, Hh). MS (ES+)  $m/z = 321.03$  [ $\text{MH}^+$ ], 260.03, 171.96, 150.05,  
170 104.06, 77.98.

171 **8g** 4-Chloro-*N*-(2-nitro-1-phenylethyl)aniline [56,58]. Dark-red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3401$ ,  
172 3066, 3032, 3005, 2968, 2919, 2843, 1601, 1555, 1501, 1457, 1423, 1404, 1380,  
173 1340, 1313, 1294, 1260, 1212, 1177, 1131, 1092, 1003, 968, 920, 819, 766, 739, 700, 668,  
174 640, 536, 501.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.45 (d, 1H, Ha,  $J=6.5$  Hz), 4.70 (m,  
175 2H, Hb), 5.11 (q, 1H, Hc,  $J=7.0$  Hz), 6.52 (d, 2H, Hd,  $J=8.9$  Hz), 7.09 (d, 2H, He,  $J=8.9$  Hz),  
176 7.31-7.41 (m, Hf, Hg, Hh).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 56.8, 80.0, 115.1, 123.7,  
177 126.4, 128.8, 129.2, 129.4, 137.3, 144.3. MS (ES+)  $m/z = 277.07$  [ $\text{MH}^+$ ], 216.05, 128.02.

178 **8h** 1-(4-((2-Nitro-1-phenylethyl)amino)phenyl)ethanone. Dark-red thick oil. IR (neat NaCl,  
179  $\text{cm}^{-1}$ ):  $\nu = 3319$ , 3156, 3087, 3068, 3027, 2963, 2919, 2864, 1651, 1594, 1562, 1533, 1496,  
180 1457, 1425, 1378, 1362, 1356, 1283, 1216, 1181, 1136, 1117, 1073, 1025, 955, 926, 834, 812,  
181 765, 724, 704, 638, 599, 577.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 2.47 (s, 3H, Ha), 4.75 (m,  
182 2H, Hb), 4.99 (d, 1H, Hc,  $J=6.7$  Hz), 5.26 (q, 1H, Hd,  $J=7.3$  Hz), 6.60 (d, 2H, He,  $J_o=6.9$  Hz,  
183  $J_m=1.9$  Hz), 7.33-7.42 (m, 5H, Hf, Hg, Hh), 7.79 (d, 2H, Hi,  $J_o=6.9$  Hz,  $J_m=1.9$  Hz).  $^{13}\text{C}$  NMR  
184 ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 26.1, 56.0, 79.8, 112.7, 126.4, 128.2, 129.0, 129.5, 130.7, 136.8,  
185 149.8, 196.5. MS (ES+)  $m/z = 285.10$  [ $\text{MH}^+$ ], 224.14, 135.09, 104.07, 93.08, 42.99.

186 **8i** 4-((2-Nitro-1-phenylethyl)amino)benzotrile. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu =$   
187 3337, 3059, 3027, 3005, 2965, 2915, 2843, 2215, 1605, 1558, 1519, 1494, 1458, 1417, 1377,  
188 1343, 1311, 1278, 1217, 1179, 1139, 1102, 1074, 1028, 1001, 968, 920, 825, 761, 700, 668,  
189 627, 606, 546.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.71 (dd, 1H, Ha,  $J=8.5$  Hz, 12.5 Hz),  
190 4.76 (dd, 1H, Hb,  $J=4.7$  Hz, 12.5 Hz), 5.03 (broad d, 1H, Hc,  $J=6.5$  Hz), 5.20 (m, 1H Hd),  
191 6.60 (d, 2H, He,  $J_o=8.9$  Hz,  $J_m=2.0$  Hz), 7.34-7.38 (m, 3H, Hf, Hg), 7.38-7.42 (m, 4H, Hh,  
192 Hi).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 55.9, 79.7, 100.7, 113.5, 120.0, 126.3, 129.1,  
193 129.6, 133.8, 136.9, 149.2. MS (ES+)  $m/z = 268.10$  [ $\text{MH}^+$ ], 221.12, 143.08, 118.10, 91.05.

194 **8j** 3-Nitro-*N*-(2-nitro-1-phenylethyl)aniline. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu = 3392$ ,  
195 3085, 3066, 3030, 3004, 2971, 2921, 2862, 1623, 1561, 1526, 1507, 1459, 1424, 1379, 1348,  
196 1276, 1220, 1129, 1099, 1081, 998, 964, 890, 853, 817, 793, 761, 737, 700, 670, 624, 529.  $^1\text{H}$   
197 NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.70-4.75 (dd, 1H, Ha,  $J=8.7$  Hz, 12.4 Hz), 4.75-4.80 (dd,  
198 1H, Hb,  $J=4.5$  Hz, 12.4 Hz), 4.88 (d, 1H, Hc,  $J=6.7$  Hz), 5.23 (d, 1H, Hd,  $J=4.7$ , 6.6, 8.5 Hz),  
199 6.89 (d, 1H, He,  $J_o=8.2$  Hz,  $J_m=2.0$  Hz), 7.25 (t, 1H, Hf,  $J=8.2$  Hz), 7.34-7.36 (m, 1H, Hg),  
200 7.38-7.42 (m, 5H, Hh, Hi, Hj), 7.55 (d, 1H, Hk  $J_o=8.2$  Hz,  $J_m=1.4$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126  
201 MHz)  $\delta$  (ppm): 56.4, 79.9, 108.0, 113.5, 119.6, 126.3, 129.1, 129.6, 130.0, 136.4, 146.6,  
202 149.3. MS (ES+)  $m/z = 288.08$  [ $\text{MH}^+$ ], 150.05, 138.99, 104.06, 91.97, 77.99.

203 **8k** 2,5-Dichloro-*N*-(2-nitro-1-phenylethyl)aniline. Red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu =$   
204 3483, 3396, 3090, 3067, 3031, 2963, 2921, 2853, 1594, 1559, 1508, 1485, 1459, 1417, 1378,  
205 1343, 1294, 1211, 1136, 1094, 1046, 952, 910, 835, 794, 768, 700, 613, 581, 532.  $^1\text{H}$  NMR  
206 ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.75 (m, 2H, Ha), 5.18 (q, 1H, Hb,  $J=6.4$  Hz), 5.23 (d, 1H, Hc,  
207  $J=6.9$  Hz), 6.51 (s, 1H, Hd,  $J_m=2.3$  Hz), 6.65 (d, 1H, He,  $J_o=8.4$  Hz,  $J_m=2.3$  Hz), 7.18 (d, 1H,  
208 Hf,  $J=8.4$  Hz), 7.35-7.42 (m, 5H, Hg, Hh, Hi).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 56.3,  
209 79.9, 112.4, 118.2, 118.7, 126.3, 129.1, 129.6, 130.0, 133.6, 136.4, 142.5. MS (ES+)  $m/z =$   
210 312.97 [ $\text{MH}^+$ ], 252.02, 217.96, 173.91, 101.73, 93.98.

211 **8l** (*E*)-*N*-(2-nitro-1-phenylethyl)-4-(phenyldiazenyl)aniline. Red solid. m.p. 103-105°C. IR  
212 (neat, KBr,  $\text{cm}^{-1}$ ):  $\nu = 3483$ , 3396, 3090, 3067, 3031, 2963, 2921, 2853, 1594, 1559, 1508,  
213 1485, 1459, 1417, 1378, 1343, 1294, 1211, 1136, 1094, 1046, 952, 910, 835, 794, 768, 700,  
214 613, 581, 532.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 4.77 (m, 1H, Ha), 4.88 (broad, 1H, Hb),  
215 5.28 (broad, 1H, Hc), 6.69 (d, 2H, Hd,  $J_o=6.8$  Hz,  $J_m=2.1$  Hz), 7.32-7.42 (m, 6H, He, Hf, Hg,  
216 Hh), 7.46 (t, 2H, Hi,  $J_o=7.5$  Hz,  $J_m=1.5$  Hz), 7.79 (d, 2H, Hj,  $J_o=6.9$  Hz,  $J_m=2.1$  Hz), 7.82 (d,  
217 2H, Hk,  $J=8.4$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 56.3, 79.8, 113.6, 122.4, 125.1,  
218 126.4, 128.9, 129.0, 129.5, 130.0, 137.0, 145.8, 148.2, 152.9. MS (ES+)  $m/z = 347.16$  [ $\text{MH}^+$ ],  
219 197.07, 104.13, 91.97, 77.07, 65.04.

220 **9a** *N*-(2-nitro-1-phenylpropyl)aniline [43,59]. Yellow-red thick oil. IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu =$   
221 3400, 3086, 3058, 3031, 3005, 2941, 2903, 2876, 1607, 1559, 1508, 1455, 1436, 1391, 1361,  
222 1320, 1297, 1284, 1255, 1201, 1181, 1155, 1142, 1081, 1033, 997, 913, 874, 839, 755, 693,  
223 610, 561, 522. NMR data is for each pair of diastereomers:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$   
224 (ppm): 1.49 (d, 3H, Ha,  $J=6.6$  Hz), 4.50 (d, 1H, Hb,  $J=8.0$  Hz), 4.79 (t, 1H, Hc,  $J=8.2$  Hz),  
225 4.87 (m, 1H, Hd), 6.59 (d, 2H, He,  $J_o=8.7$  Hz,  $J_m=1.0$  Hz), 6.70 (t, 1H, Hf,  $J_o=7.3$  Hz,  $J_m=1.0$   
226 Hz), 7.10 (t, 2H, Hg,  $J_o=7.9$  Hz,  $J_m=1.2$  Hz), 7.28-7.37 (m, 5H, Hh, Hi, Hj).  $^1\text{H}$  NMR ( $\text{CDCl}_3$ ,  
227 500 MHz)  $\delta$  (ppm): 1.55 (d, 3H, Ha,  $J_m=1.6$  Hz), 4.44 (d, 1H, Hb,  $J=6.6$  Hz), 4.94 (m, 1H,  
228 Hc), 5.01 (m, 1H, Hd), 6.57 (d, 2H, He,  $J=8.5$  Hz), 6.72 (t, 1H, Hf,  $J_o=7.3$  Hz,  $J_m=0.9$  Hz),  
229 7.11 (t, 2H, Hg,  $J_o=8.0$  Hz,  $J_m=1.0$  Hz), 7.30-7.37 (m, 5H, Hh, Hi, Hj).

230 **9b** *N*-(2-nitro-1-phenylbutyl)aniline [36]. Red solid. m.p. 114-116°C. IR (neat, KBr,  $\text{cm}^{-1}$ ):  $\nu =$   
231 3385, 3090, 3068, 3036, 2972, 2938, 2912, 2877, 1606, 1546, 1511, 1460, 1438, 1374,  
232 1339, 1314, 1279, 1257, 1231, 1206, 1181, 1158, 1136, 1114, 1082, 1034, 1000, 917, 892,  
233 872, 856, 834, 803, 771, 748, 707, 688, 628, 606, 513, 495. NMR data is for each pair of

234 diastereomers: <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 0.94 (t, 3H, Ha, *J*=7.4 Hz), 1.65 (m, 1H,  
 235 Hb), 2.09 (m, 1H, Hc), 4.57 (d, 1H, Hd, *J*=8.6 Hz), 4.68 (ddd, 1H, He, *J*=11.1 Hz, 7.9 Hz, 4.0  
 236 Hz), 4.80 (t, 1H, Hf, *J*=8.3 Hz), 6.57 (2H, Hg, *J*=8.8 Hz), 6.68 (t, 1H, Hh, *J*<sub>o</sub>=7.3 Hz, *J*<sub>m</sub>=1.0  
 237 Hz), 7.09 (t, 2H, Hi, *J*<sub>o</sub>=8.0 Hz, *J*<sub>m</sub>=2.0 Hz), 7.28-7.36 (m, 5H, Hj, Hk, Hl). <sup>13</sup>C NMR (CDCl<sub>3</sub>,  
 238 126 MHz) δ (ppm): 10.4, 24.8, 60.5, 94.8, 113.9, 118.6, 126.9, 128.5, 129.1, 129.2, 138.1,  
 239 145.9. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 0.97 (t, 3H, Ha, *J*=7.3 Hz), 1.90 (m, 1H, Hb),  
 240 2.17 (m, 1H, Hc), 4.38 (d, 1H, Hd, *J*=6.5 Hz), 4.75 (ddd, 1H, He, *J*=11.0 Hz, 5.8 Hz, 3.1  
 241 Hz), 4.90 (t, 1H, Hf, *J*=6.1 Hz), 6.56 (d, 2H, Hg, *J*<sub>o</sub>=8.7 Hz, *J*<sub>m</sub>=1.0 Hz), 6.72 (t, 1H, Hh,  
 242 *J*<sub>o</sub>=7.3 Hz, *J*<sub>m</sub>=1.0 Hz), 7.11 (t, 2H, Hi, *J*<sub>o</sub>=8.0 Hz, *J*<sub>m</sub>=2.0 Hz), 7.28-7.36 (m, 5H, Hj, Hk, Hl).  
 243 <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 10.7, 22.3, 60.6, 94.0, 114.0, 118.7, 126.9, 128.6,  
 244 129.0, 129.3, 137.7, 146.1. MS (ES+) *m/z* = 271.16 [MH<sup>+</sup>], 148.03, 77.07, 56.19.

245 **4a** 3-Nitro-*N*-(2-nitro-1-(*p*-tolyl)ethyl)aniline. Red thick oil. IR (neat NaCl, cm<sup>-1</sup>): *v* = 3398,  
 246 3089, 3027, 2923, 2864, 1624, 1588, 1559, 1536, 1422, 1380, 1351, 1266, 1214, 1181, 1109,  
 247 1096, 1071, 1044, 1025, 996, 966, 918, 859, 820, 794, 758, 739, 673, 521. <sup>1</sup>H NMR (CDCl<sub>3</sub>,  
 248 500 MHz) δ (ppm): 2.34 (s, 3a, Ha), 4.72 (m, 2H, Hb), 4.86 (d, 1H, Hc, *J*=6.7 Hz), 5.19 (ddd,  
 249 1H, Hd, *J*=8.4 Hz, 7.0 Hz, 4.7 Hz), 6.89 (d, 1H, He, *J*<sub>o</sub>=8.2 Hz, *J*<sub>m</sub>=0.7 Hz), 7.2 (d, 2H, Hf,  
 250 *J*=8.9 Hz), 7.24-7.29 (m, 3H, Hg, Hh), 7.41 (s, 1H, Hi, *J*<sub>m</sub>=2.3 Hz), 7.56 (d, 1H, Hj, *J*<sub>o</sub>=8.1  
 251 Hz, *J*<sub>m</sub>=0.8 Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 21.1, 56.2, 80.0, 108.0, 113.4, 119.6,  
 252 126.2, 130.0, 130.2, 133.4, 139.0, 146.7, 149.3. MS (ES+) *m/z* = 302.10 [MH<sup>+</sup>], 164.08,  
 253 118.10, 121.03, 117.71, 91.05.

254 **4b** 4-Chloro-*N*-(1-(4-methoxyphenyl)-2-nitroethyl)aniline. Red thick oil. IR (neat NaCl, cm<sup>-1</sup>):  
 255 *v* = 3390, 3106, 3070, 3034, 3008, 2962, 2936, 2916, 2838, 1605, 1559, 1513, 1497, 1464,  
 256 1421, 1379, 1340, 1310, 1254, 1176, 1121, 1091, 1032, 970, 826, 783, 731, 682, 640, 564,  
 257 548, 525, 509. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 3.79 (s, 3H, Ha), 4.4 (d, 1H, Hb, *J*=6.4  
 258 Hz), 4.67 (d, 2H, Hc, *J*=6.7 Hz), 5.06 (q, 1H, Hd, *J*=6.7 Hz), 6.52 (d, 2H, He, *J*=8.9 Hz), 6.90  
 259 (d, 2H, Hf, *J*=8.8 Hz), 7.08 (d, 2H, Hg, *J*=8.9 Hz), 7.28 (d, 2H, Hh, *J*=8.6 Hz). <sup>13</sup>C NMR  
 260 (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 55.3, 56.3, 80.1, 114.8, 115.1, 127.6, 129.2, 131.2, 139.1, 144.3,  
 261 159.9. MS (ES+) *m/z* = 307.09 [MH<sup>+</sup>], 180.05, 119.04, 91.06.

262 **4c** 3-(1-((4-methoxyphenyl)amino)-2-nitroethyl)phenol. Dark-red thick oil. IR (neat NaCl,  
 263 cm<sup>-1</sup>): *v* = 3361, 3306, 3066, 3035, 3000, 2952, 2931, 2827, 1591, 1560, 1513, 1457, 1377,  
 264 1298, 1239, 1183, 1127, 1035, 997, 934, 827, 788, 730, 699, 517. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500  
 265 MHz) δ (ppm): 3.71 (s, 3H, Ha), 4.66 (d, 2H, Hb, *J*=6.7 Hz), 4.74 (m, 1H, Hc), 5.02 (t, 1H,  
 266 Hd, *J*=6.7 Hz), 5.16-5.38 (broad, 1H, He), 6.57 (d, 2H, Hf, *J*<sub>o</sub>=8.9 Hz, *J*<sub>m</sub>=2.3 Hz), 6.73 (d,  
 267 2H, Hg, *J*<sub>o</sub>=8.9 Hz, *J*<sub>m</sub>=2.2 Hz), 6.77 (d, 1H, Hh, *J*<sub>o</sub>=9.9 Hz, *J*<sub>m</sub>=0.6 Hz), 6.85 (s, 1H, Hi,  
 268 *J*<sub>m</sub>=2.0 Hz), 6.94 (d, 1H, Hj, *J*=8.6 Hz, *J*<sub>m</sub>=1.5 Hz), 7.24 (t, 1H, Hk, *J*=7.9 Hz). <sup>13</sup>C NMR  
 269 (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 55.7, 57.5, 80.0, 114.6, 115.0, 115.7, 117.2, 122.4, 130.2, 130.6,  
 270 139.7, 139.8, 144.0, 153.0, 156.5. MS (ES+) *m/z* = 289.07 [MH<sup>+</sup>], 200.15, 166.06, 123.92.

271 **4d** 4-bromo-*N*-(1-cyclohexyl-2-nitroethyl)aniline. Red solid. IR m.p. 74-75°C. IR (neat, KBr,  
 272 cm<sup>-1</sup>): *v* = 3405, 3386, 3100, 3077, 3064, 3038, 2929, 2851, 1598, 1558, 1509, 1489, 1446,  
 273 1424, 1387, 1354, 1318, 1299, 1250, 1217, 1184, 1155, 1135, 1115, 1096, 1079, 1030, 1014,

274 1000, 971, 931, 915, 892, 816, 803, 745, 699, 672, 639, 597, 508, 442, 423. <sup>1</sup>H NMR (CDCl<sub>3</sub>,  
275 500 MHz) δ (ppm): 1.00-1.30 (m, 5H, Ha, Hb, Hc), 1.60 (m, 1H, Hd), 1.65-1.85 (m, He, Hf),  
276 1.90 (m, Hg), 3.72 (d, 1H, Hh, *J*=9.8 Hz), 3.92 (m, 1H, Hi), 4.46 (dd, 1H, Hj, *J*=6.8 Hz, 12.2  
277 Hz), 4.53 (dd, 1H, Hk, *J*=5.2 Hz, 12.2 Hz), 6.53 (d, 2H, Hl, *J*=7.4 Hz), 7.26 (m, 2H, Hm). <sup>13</sup>C  
278 NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 25.9, 26.1, 28.9, 29.6, 40.8, 57.2, 76.6, 110.0, 115.0,  
279 132.3, 145.7. MS (ES+) *m/z* = 325.03 [MH<sup>+</sup>], 169.93, 154.07, 136.05, 78.89, 60.02.

280 **4e** 4-methyl-*N*-(2-nitro-1-(2-nitrophenyl)ethyl)aniline. Yellow-red solid. m.p. 85-87°C. IR  
281 (neat, KBr, cm<sup>-1</sup>): ν = 3375, 3104, 3078, 3030, 2920, 2862, 1622, 1580, 1560, 1522, 1474,  
282 1435, 1386, 1340, 1289, 1263, 1250, 1215, 1182, 1154, 1131, 1086, 1066, 937, 921, 879, 860,  
283 851, 811, 792, 750, 724, 708, 673, 647, 627, 560, 517, 505. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ  
284 (ppm): 2.18 (s, 3H, Ha), 4.64-4.86 (broad, 1H, Hb), 4.83 (dd, 1H, Hc, *J*=7.6 Hz, 12.5 Hz),  
285 5.00 (dd, 1H, Hd, *J*=3.7 Hz, 12.5 Hz), 5.76 (dd, 1H, He, *J*=3.7 Hz, 7.6 Hz), 6.40 (d, 2H, Hf,  
286 *J*=8.5 Hz), 6.66 (d, 2H, Hg, *J*=8.5 Hz), 7.49 (t, 1H, Hh, *J*<sub>o</sub>=7.8 Hz, *J*<sub>m</sub>=1.5 Hz), 7.60 (t, 1H,  
287 Hi, *J*<sub>o</sub>=7.6 Hz, *J*<sub>m</sub>=1.4 Hz), 7.68 (d, 1H, Hj, *J*<sub>o</sub>=7.8 Hz, *J*<sub>m</sub>=1.4 Hz), 8.08 (d, 1H, Hk, *J*<sub>o</sub>=8.1  
288 Hz, *J*<sub>m</sub>=1.4 Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 20.4, 52.9, 79.3, 113.8, 125.7, 128.7,  
289 129.0, 129.6, 130.0, 133.5, 134.4, 142.5, 148.7. MS (ES+) *m/z* = 302.10 [MH<sup>+</sup>], 241.15,  
290 120.05, 119.73, 107.05.

291 **4g** *N*-(1-(4-bromophenyl)-2-nitroethyl)-4-ethylaniline. Red oil. IR (neat NaCl, cm<sup>-1</sup>): ν =  
292 3377, 3086, 3015, 2957, 2919, 2860, 1604, 1582, 1547, 1511, 1478, 1446, 1414, 1369, 1330,  
293 1307, 1259, 1211, 1178, 1126, 1107, 1097, 1069, 1039, 1007, 962, 917, 820, 759, 726, 661,  
294 648, 532. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 1.15 (t, 3H, Ha, *J*=7.6 Hz), 2.50 (q, 2H, Hb,  
295 *J*=7.6 Hz), 4.29 (d, 1H, Hc, *J*=6.1 Hz), 4.67 (d, 2H, Hd, *J*=6.7 Hz), 5.09 (q, 1H, He, *J*=6.5  
296 Hz), 6.52 (d, 2H, Hf, *J*<sub>o</sub>=8.5 Hz, *J*<sub>m</sub>=2.0 Hz), 6.98 (d, 2H, Hg, *J*=8.5 Hz), 7.28 (d, 2H, Hh,  
297 *J*<sub>o</sub>=8.4 Hz, *J*<sub>m</sub>=1.7 Hz), 7.50 (d, 2H, Hi, *J*<sub>o</sub>=8.5 Hz, *J*<sub>m</sub>=1.9 Hz). <sup>13</sup>C NMR (CDCl<sub>3</sub>, 126 MHz) δ  
298 (ppm): 15.8, 27.9, 56.5, 79.8, 114.1, 122.6, 128.2, 128.8, 132.5, 135.2, 137.0, 143.2. MS  
299 (ES+) *m/z* = 351.08 [MH<sup>+</sup>], 335.77, 180.26, 90.98, 64.97.

300 **4h** 4-methyl-*N*-(1-nitropentan-2-yl)aniline. Red oil. IR (neat NaCl, cm<sup>-1</sup>): ν = 3398, 3027,  
301 2965, 2933, 2871, 1621, 1588, 1553, 1520, 1468, 1429, 1383, 1354, 1321, 1305, 1259, 1230,  
302 1208, 1188, 1155, 1123, 1038, 993, 921, 813, 735, 644, 628, 511. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500  
303 MHz) δ (ppm): 0.95 (t, 3H, Ha, *J*=7.3 Hz), 1.38-1.68 (m, 4H, Hb, Hc), 2.24 (s, 3H, Hd), 3.52  
304 (d, 1H, He, *J*=7.9 Hz), 4.03 (q, 1H, Hf, *J*=5.8 Hz), 4.41 (dd, 1H, Hg, *J*=6.1 Hz, 11.7 Hz), 4.52  
305 (dd, 1H, Hh, *J*=5.0 Hz, 11.7 Hz), 6.58 (d, 2H, Hi, *J*=8.4 Hz), 7.01 (d, 2H, Hj, *J*=8.0 Hz). <sup>13</sup>C  
306 NMR (CDCl<sub>3</sub>, 126 MHz) δ (ppm): 13.8, 19.2, 20.4, 35.1, 52.4, 78.1, 113.8, 128.0, 130.1,  
307 143.7. MS (ES+) *m/z* = 229.07 [MH<sup>+</sup>], 199.24, 184.74, 118.00, 91.06.

308 **4i** (*E*)-*N*-(2-nitro-1-(*p*-tolyl)ethyl)-4-(phenyldiazenyl)aniline. Dark-red thick oil. IR (neat  
309 NaCl, cm<sup>-1</sup>): ν = 3397, 3064, 3035, 2956, 2924, 2860, 1605, 1558, 1516, 1460, 1434, 1411,  
310 1377, 1339, 1313, 1278, 1240, 1186, 1142, 1100, 1075, 1024, 967, 919, 862, 834, 767, 722,  
311 687, 668, 640, 548, 532. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) δ (ppm): 2.34 (s, 3H, Ha), 4.75 (d, Hb,  
312 2H, *J*=6.6 Hz), 4.84 (d, Hc, 1H, *J*=6.7 Hz), 5.24 (m, Hd, 1H), 6.69 (d, 2H, He, *J*=8.9 Hz),  
313 7.20 (d, 2H, Hf, *J*=7.9 Hz), 7.28 (d, 2H, Hg, *J*=8.1 Hz), 7.39 (t, 1H, Hh, *J*<sub>o</sub>=7.3 Hz, *J*<sub>m</sub>=1.3



314 Hz), 7.46 (t, 2H, Hi,  $J=7.9$  Hz), 7.79 (d, 2H, Hj,  $J_o=8.9$  Hz,  $J_m=2.0$  Hz), 7.81 (d, 2H, Hk,  
 315  $J=8.3$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 21.1, 56.1, 79.9, 113.5, 122.4, 125.1, 126.3,  
 316 129.0, 129.9, 130.1, 133.9, 138.8, 145.7, 148.3, 153.0. MS (ES+)  $m/z$  = 361.18 [ $\text{MH}^+$ ],  
 317 197.18, 118.04, 91.90, 77.00, 64.97.

318 **4j** 1-(4-((1-(4-methoxyphenyl)-2-nitropropyl)amino)phenyl)ethanone. Yellow-red thick oil.  
 319 IR (neat NaCl,  $\text{cm}^{-1}$ ):  $\nu$  = 3348, 3059, 3004, 2962, 2939, 2906, 2839, 1656, 1602, 1556, 1514,  
 320 1458, 1439, 1426, 1388, 1365, 1307, 1281, 1254, 1184, 1147, 1122, 1083, 1034, 960, 876,  
 321 833, 759, 669, 636, 597, 532.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 1.56 (d, 3H, Ha,  $J=6.8$   
 322 Hz), 2.46 (s, 3H, Hb), 3.79 (s, 3H, Hc), 4.80 (t, 1H, Hd,  $J=7.9$  Hz), 4.99 (m, 1H, He), 5.05  
 323 (d, 1H, Hf,  $J=6.8$  Hz), 6.56 (d, 2H, Hg,  $J=8.9$  Hz), 6.89 (d, 2H, Hh,  $J=8.8$  Hz), 7.21 (d, 2H,  
 324 Hi,  $J=8.7$  Hz), 7.74 (d, 2H, Hj,  $J=8.8$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 14.1, 26.1,  
 325 55.3, 59.7, 86.3, 112.8, 114.6, 128.0, 130.5, 150.1, 159.8, 196.4.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  
 326  $\delta$  (ppm): 1.52 (d, Ha, 3H,  $J=6.5$  Hz), 2.45 (s, Hb, 3H), 3.78 (s, Hc, 3H), 4.85 (t, 1H, Hd,  $J=$   
 327 7.8 Hz), 4.94 (m, 1H, He), 5.05 (d, 1H, Hf,  $J=6.8$  Hz), 6.54 (d, 2H, Hg,  $J=8.9$  Hz), 6.88 (d,  
 328 2H, Hh,  $J=8.9$  Hz), 7.23 (d, 2H, Hi,  $J=8.6$  Hz), 7.76 (d, 2H, Hj,  $J=8.8$  Hz).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ ,  
 329 126 MHz)  $\delta$  (ppm): 17.1, 26.0, 55.3, 60.3, 87.5, 112.7, 114.7, 128.0, 130.5, 150.1, 159.9,  
 330 196.4. MS (ES+)  $m/z$  = 329.10 [ $\text{MH}^+$ ], 254.11, 148.03, 136.00, 117.01, 105.04.

331 **4k** 4-methyl-*N*-(2-nitro-1-(2-nitrophenyl)butyl)aniline. Red thick oil. IR (neat NaCl,  
 332  $\text{cm}^{-1}$ ):  $\nu$  = 3397, 3054, 3025, 2978, 2936, 2920, 2876, 1621, 1593, 1555, 1523, 1488, 1456,  
 333 1405, 1377, 1332, 1329, 1300, 1269, 1256, 1186, 1173, 1142, 1110, 1075, 1014, 935, 884,  
 334 808, 760, 716, 633, 541.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 0.94 (t, 3H, Ha,  $J=7.4$  Hz),  
 335 1.66 (m, 1H, Hb), 2.08 (m, 1H, Hc), 2.2 (s, 3H, Hd), 4.46 (broad, 1H, He), 4.63 (m, 1H, Hf),  
 336 4.73 (m, 1H, Hg), 6.45 (d, 2H, Hh,  $J=8.5$  Hz), 6.90 (d, 2H, Hi,  $J=8.7$  Hz), 7.18 (m, 2H, Hj),  
 337 7.46 (m, 2H, Hk).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 10.4, 20.4, 24.8, 60.2, 94.6, 114.1,  
 338 122.4, 128.1, 128.6, 129.8, 132.3, 137.4, 143.2.  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)  $\delta$  (ppm): 0.97 (t,  
 339 3H, Ha,  $J=7.3$  Hz), 1.90 (m, 1H, Hb), 2.14 (m, 1H, Hc), 4.24 (broad, 1H, Hd), 4.68 (m, 1H,  
 340 He), 4.80 (m, 1H, Hf), 6.44 (d, 2H, Hg,  $J=8.5$  Hz), 6.92 (d, 2H, Hh,  $J=9.1$  Hz), 7.20 (m, 2H,  
 341 Hi), 7.46 (m, 2H, Hj).  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 126 MHz)  $\delta$  (ppm): 10.7, 22.4, 24.8, 60.4, 93.7,  
 342 114.2, 122.4, 128.4, 128.6, 129.8, 132.2, 137.0, 143.4. MS (ES+)  $m/z$  = 314.12, 274.11,  
 343 210.04, 178.06, 131.10, 108.09, 93.04, 91.03, 60.81.

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