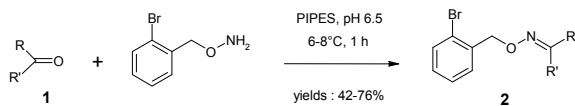


Supporting Information

Scheme S1 : Oxime ether synthesis



Synthesis of oxime ethers **2a-2k** :

General method: BBHA (50-100 μmol , 1-2 eq) was added to a solution of the carbonyl compound (**1a-1k**, 50 μmol) in PIPES buffer (0.1 M, pH 6.5, 1 mL). The mixture was stirred at 6-8 °C for one hour.

Work-up: SPE cartridge was washed with methanol (6 mL), then water (6 mL). The reaction mixture was added on the cartridge then washed with PIPES (6 mL), 0.05 % TFA/MeOH (1/1, 12 mL). The purified fraction was eluted with methanol (10 mL) then evaporated under vacuum. The oxime ethers **2a-2k** were obtained as semi-crystallized oils.

Table S1 : Oxime ethers **2a-2k** (structures, yields, HR-MS data).

Table S2 : Oxime ethers **2a-2k** (NMR data).

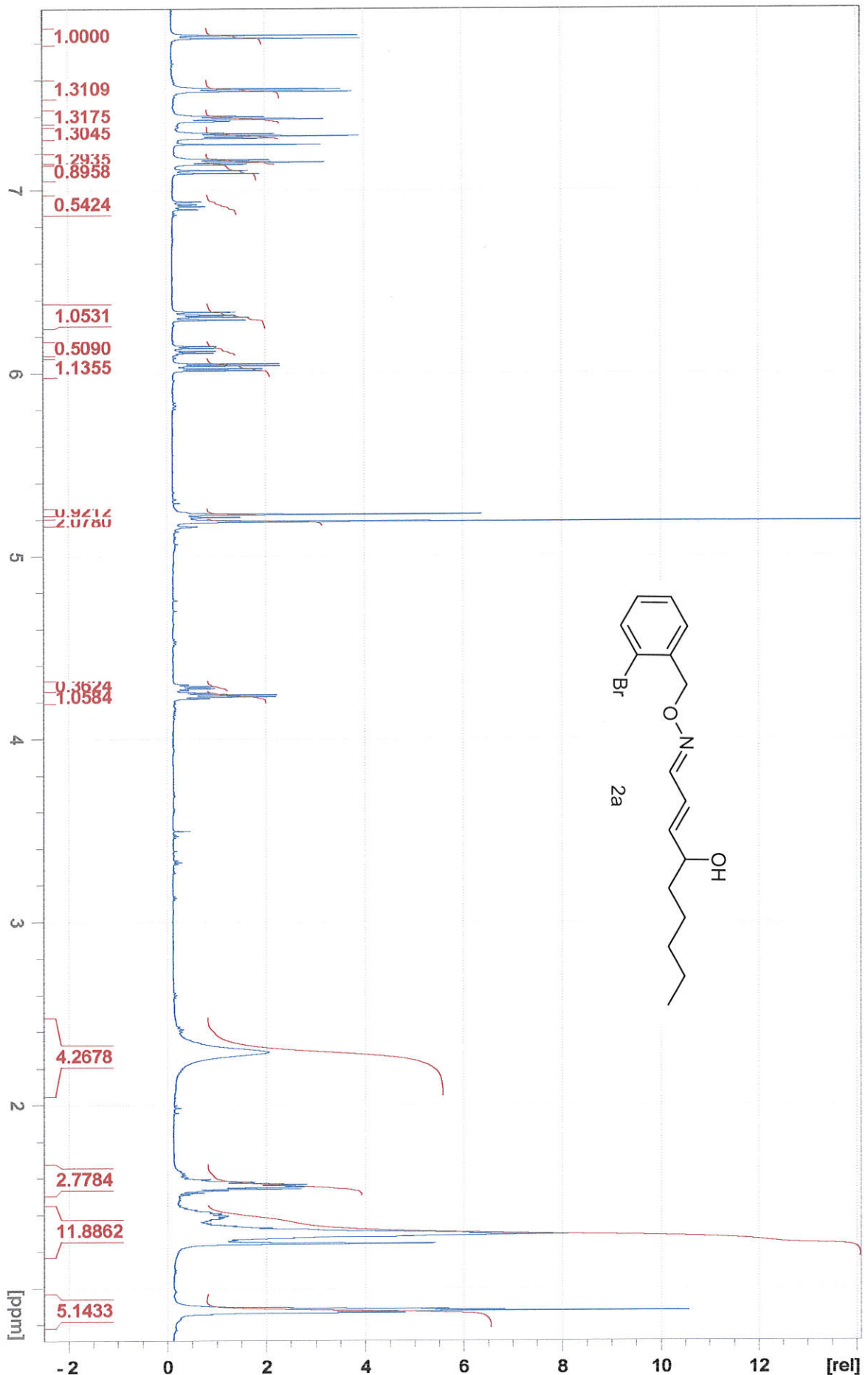
Table S1 : Oxime ethers **2a-2k** (structures, yields, HR-MS data).

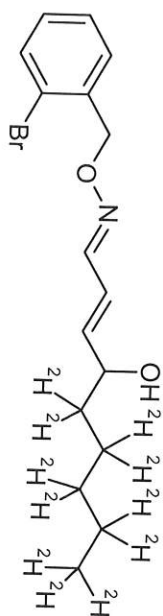
Compound	Structure	Yield (%)	HRMS : m/z [M+H] ⁺	
			Calculated	Found
2a R = CH=CH-CHOH-C ₅ H ₁₁ , R' = H		60	340.0907/342.0886 [C ₁₆ H ₂₂ NO ₂ Br] ⁺	340.0912/342.0886
2b R = CH=CH-CHOH-C ₅ ² H ₁₁ , R' = H		68	351.1597/353.1577 [C ₁₆ H ₁₁ ² H ₁₁ NO ₂ Br] ⁺	351.1604/353.1577
2c R = CH=CH-CHOH-C ₂ H ₅ , R' = H		59	298.0437/300.0417 [C ₁₃ H ₁₆ NO ₂ Br] ⁺	298.0442/300.0416
2d R = CH=CH-CHOH-C ₂ ² H ₅ , R' = H		67	303.0751/305.0731 [C ₁₃ H ₁₁ ² H ₅ NO ₂ Br] ⁺	303.0751/305.0726
2e R = CH ₂ -CH ₂ -CHOH-C ₅ H ₁₁ , R' = H		71	342.1063/344.1043 [C ₁₆ H ₂₄ NO ₂ Br] ⁺	342.1068/344.1043
2f R = (CH ₂) ₇ -CO ₂ H, R' = H		76	356.0856/358.0835 [C ₁₆ H ₂₂ NO ₃ Br] ⁺	356.0858/358.0836
2g R=CH ₂ -CH=N-O-CH ₂ -Ar, R'=H		56	438.9651/440.9631/442.9610 [C ₁₇ H ₁₆ N ₂ O ₂ Br ₂] ⁺	438.9659/440.9635/442.9611
2h R=C ₅ ² H ₁₁ , R'= ² H		59	296.1398/298.1378 [C ₁₃ H ₆ ² H ₁₂ NOBr] ⁺	296.1400/298.1376
2i R=[² H ₅]Ph, R'= ² H		63	295.0489/297.0469 [C ₁₄ H ₇ ² H ₅ NOBr] ⁺	295.0492/297.0467
2j R=R'=CH ₃		42	242.0175/244.0155 [C ₁₀ H ₁₂ NOBr] ⁺	242.0175/244.0148
2k R=R'=Ph		45	366.04880/368.04676 [C ₂₀ H ₁₆ NOBr] ⁺	366.04938/368.04678

Table S2 : Oxime ethers **2a-2k** (NMR data).

Compound	¹ H-NMR (600 MHz)	¹³ C-NMR (150 MHz)
2a	δ (CDCl ₃) = 7.83 (d, J=9.8 Hz, 1 H, CH=N, isomer1), 7.54 (d, J=7.7Hz, 1.3 H), 7.38 (m, 1.3 H), 7.29 (t, J=7.5Hz, 1.3 H), 7.15 (m, 1.3 H), 7.10 (d, J=9.5Hz, 0.9 H, CH=N, isomer 2), 6.91 (dd, J=16/9.6Hz, 0.5 H, CH=CH, isomer 2), 6.31 (dd, J=16/9.9Hz, 1 H, CH=CH, isomer 1), 6.12 (dd, J=16/5.8Hz, 0.5 H, CH=CH, isomer 2), 6.03 (dd, J=16/6.1Hz, 1 H, CH=CH, isomer 1), 5.22 (s, 1 H, CH ₂ -O, isomer 2), 5.19 (s, 2 H, CH ₂ -O, isomer 1), 4.28 (q, J=6.0 Hz, 0.4 H, CHOH, isomer 2), 4.23 (q, J=6.0Hz, 1 H, CHOH, isomer 1), 2.3 (OH), 1.6-1.2 (m, 12 H), 0.88 (t, J=6.8Hz, 4.5 H).	δ (CDCl ₃) = 150.5 ; 148.1 ; 145.3 ; 143.6 ; 136.9 ; 132.6 ; 129.7 ; 129.5 ; 129.2 ; 129.1 ; 127.3 ; 123.3 ; 123.0 ; 118.0 ; 75.4 ; 75.3 ; 72.1 ; 72.0 ; 36.9 ; 31.6 ; 24.9 ; 22.5 ; 13.9.
2b	δ (CDCl ₃) = 7.84 (d, J=9.8 Hz, 1 H, CH=N, isomer 1), 7.54 (d, J=7.0 Hz, 1 H), 7.40 (m, 1.2 H), 7.29 (m, 1.1 H), 7.16 (m, 1.1 H), 7.09 (d, J=8.4 Hz, 0.4 H, CH=N, isomer 2), 6.96 (m, 0.4 H, CH=CH, isomer2), 6.31 (dd, J=16/9.8Hz, 1 H, CH=CH, isomer 1), 6.10 (dd, J=16/8.4Hz, 0.4 H, CH=CH, isomer 2), 6.02 (dd, J=16/5.6Hz, 1 H, CH=CH, isomer 1), 5.22 (s, 1 H, CH ₂ -O, isomer 2), 5.20 (s, 2 H, CH ₂ -O, isomer 1), 4.27 (m, 0.4 H, CHOH, isomer 2), 4.23 (m, 1 H, CHOH, isomer 1).	δ (CDCl ₃) = 150.5 ; 148.1 ; 145.4 ; 143.7 ; 136.9 ; 132.6 ; 129.7 ; 129.5 ; 129.2 ; 129.1 ; 127.3 ; 123.3 ; 122.9 ; 118.0 ; 75.4 ; 75.3 ; 71.9 ; 71.8.
2c	δ (CDCl ₃) = 7.84 (d, J=9.9 Hz, 1 H, CH=N, isomer 1), 7.54 (d, J=8.0Hz, 1.5 H), 7.38 (m, 1.5 H), 7.29 (t, J=7.5Hz, 1.5 H), 7.15 (m, 1.5 H), 7.09 (d, J=9.5Hz, 0.4 H, CH=N, isomer 2), 6.92 (dd, J=16/9.6Hz, 0.4 H, CH=CH, isomer 2), 6.32 (dd, J=16/9.8Hz, 1 H, CH=CH, isomer 1), 6.11 (dd, J=16/5.9Hz, 0.4 H, CH=CH, isomer 2), 6.02 (dd, J=16/6.0Hz, 1 H, CH=CH, isomer 1), 5.22 (s, 1 H, CH ₂ -O, isomer 2), 5.21 (s, 2 H, CH ₂ -O, isomer 1), 4.19 (q, J=5.5 Hz, 0.4 H, CHOH), 4.16 (q, J=6.2Hz, 1 H, CHOH), 2.1 (OH), 1.6 (m, 3H), 0.94 (t, J=7.4Hz, 4.5 H).	δ (CDCl ₃) = 150.4 ; 148.1 ; 144.9 ; 143.2 ; 136.9 ; 132.6 ; 129.7 ; 129.5 ; 129.2 ; 129.1 ; 127.3 ; 123.6 ; 123.0 ; 118.2 ; 75.4 ; 75.3 ; 73.3 ; 73.1 ; 29.8 ; 9.5.
2d	δ (CDCl ₃) = 7.84 (d, J=9.8 Hz, 1 H, CH=N, isomer 1), 7.55 (d, J=7.2Hz, 1.1 H), 7.40 (m, 1.3 H), 7.30 (, t, J=7.5Hz, 1.3 H), 7.16 (m, 1.3 H), 7.09 (d, J=9.5Hz, 0.4 H, CH=N, isomer 2), 6.93 (dd, J=16/9.6Hz, 0.4 H, CH=CH, isomer 2), 6.33 (dd, J=16/9.9Hz, 1 H, CH=CH, isomer 1), 6.12 (dd, J=16/5.8Hz, 0.3 H, CH=CH, isomer 2), 6.03 (dd, J=16/6.1Hz, 1 H, CH=CH, isomer 1), 5.23 (s, 0.9 H, CH ₂ -O, isomer 2), 5.20 (s, 2 H, CH ₂ -O, isomer 1), 4.22 (m, 0.4 H, CHOH, isomer 2), 4.17 (m, 0.9 H, CHOH, isomer 1).	δ (CDCl ₃) = 150.5 ; 148.1 ; 145.0 ; 143.3 ; 136.9 ; 132.6 ; 129.7 ; 129.5 ; 129.2 ; 129.1 ; 127.3 ; 123.5 ; 123.0 ; 118.2 ; 75.4 ; 75.3 ; 73.1 ; 73.0.
2e	δ (MeOD) = 7.55 (m, 1.4 H, Ar, CH=N isomer 1), 7.40 (m, 1H), 7.35 (m, 1 H), 7.15 (m, 1 H), 6.77 (m, 0.5 H, m, isomer 2), 5.20 (s, 1 H, CH ₂ -O, isomer 2), 5.14 (s, 1.2 H, CH ₂ -O, isomer 1), 3.55 (m, 1.2 H, CHOH), 2.6-2.4 (m, 1.2 H, CH ₂ -CH=N), 2.4-2.2 (m, 1.5 H, CH ₂ -CH=N), 1.7-1.5 (m, 2H), 1.4 (m, 4 H), 1.3-1.2 (m, 6H), 0.8 (t, J=7.4Hz, 3 H).	δ (MeOD) = 153.0 ; 152.2 ; 137.1 ; 137.0 ; 132.3 ; 132.3 ; 129.7 ; 129.6 ; 129.1 ; 129.0 ; 127.2 ; 127.1 ; 124.8 ; 122.6 ; 122.4 ; 74.6 ; 74.2 ; 70.6 ; 70.3 ; 36.9 ; 36.8 ; 33.5 ; 33.1 ; 31.6 ; 31.6 ; 29.6 ; 25.5 ; 25.0 ; 22.3 ; 22.1 ; 13.0.
2f	δ (CDCl ₃) = 7.54 (m, 1 H), 7.49 (t, J=6.7 Hz, 0.5 H, CH=N, isomer 1), 7.39 (d, 1 H), 7.29 (m, 1 H), 7.14 (m, 1 H), 6.70 (t, J=5.3 Hz, 0.4 H), 5.18 (s, 1 H, CH ₂ -O), 5.14 (s, 1.2 H, CH ₂ -O), 2.39 (m, 1 H, CH ₂ -CH=N, isomer 2), 2.32 (m, 2.2 H, CH ₂ -CO ₂ H), 2.18 (m, 1.3 H, CH ₂ -CH=N, isomer 1), 1.6-1.3 (m, 10 H).	δ (CDCl ₃) = 179.3 ; 153.0 ; 151.9 ; 137.4 ; 137.3 ; 132.6 ; 129.6 ; 129.4 ; 129.0 ; 127.2 ; 122.9 ; 75.0 ; 74.7 ; 33.9 ; 29.4 ; 29.1 ; 28.9 ; 28.8 ; 26.5 ; 26.1 ; 25.8 ; 24.6.
2g	δ (CDCl ₃) = 7.59-7.53 (m, 2.7 H, Ar and CH=N isomers 1-2), 7.39-7.34 (m, 2 H), 7.30 (t, J=7.3Hz, 2 H), 7.15 (m, 2H), 6.89-6.85 (2 t, 0.9 H, J=5.2/5.4 Hz, CH=N, isomers 2-3), 5.21 (s, 2.8 H, CH ₂ -O), 5.16 (s 2 H, CH ₂ -O), 3.46 (t, J=5.4Hz, 0.7 H, CH ₂ -CH=N, isomer 3), 3.33 (, t, J=5.4Hz, 1.1 H, CH ₂ -CH=N, isomer 2), 3.13 (t, J=5.6Hz, 0.5 H, CH ₂ -CH=N, isomer 1).	δ (CDCl ₃) = 146.5 ; 145.9 ; 145.8 ; 145.7 ; 136.9 ; 132.7 ; 132.6 ; 129.8 ; 129.8 ; 129.7 ; 129.6 ; 129.2 ; 129.2 ; 127.3 ; 123.0 ; 75.3 ; 75.1 ; 30.2 ; 26.9 ; 24.3.
2h	δ (CDCl ₃) = 7.53 (d, J=7.9 Hz, 1 H), 7.39-7.37 (2d, J=7.6 Hz, 1 H), 7.29 (t, J=7.5 Hz, 1 H), 7.14 (t, J=7.6 Hz, 1 H), 5.18 (s, 1 H, CH ₂ -O), 5.13 (s, 1.3 H, CH ₂ -O).	δ (CDCl ₃) = 137.5 ; 137.3 ; 132.6 ; 129.6 ; 129.3 ; 129.0 ; 129.0 ; 127.2 ; 122.9 ; 74.9 ; 74.6.
2i	δ (CDCl ₃) = 8.20 (s, 1 H, CH=N), 7.57 (d, J=8.0 Hz, 1.2 H), 7.48 (d, J=7.6 Hz, 1.2 H), 7.36 (s, 0.2H, CH=N, isomer 2) ; 7.32 (t, J=7.5 Hz, 1.2 H), 7.16 (m, 1.2 H), 5.35 (s, 0.4 H, CH ₂ -O, isomer	δ (CDCl ₃) = 149.3 ; 137.1 ; 132.6 ; 131.9 ; 129.9 ; 129.2 ; 127.3 ; 123.0 ; 75.5.

	2), 5.30 (s, 2 H, CH ₂ -O, isomer 1).	
2j	δ (MeOD) = 7.54 (d, J=7.8Hz, 1 H), 7.40 (d, J = 7.4Hz, 1 H), 7.30 (t, J=7.5Hz, 1 H), 7.15 (td, J=7.5/1.4Hz, 1 H), 5.15 (s, 2 H, CH ₂ -O), 1.94 (s, 3 H), 1.89 (s, 3 H).	δ (MeOD) = 156.2 ; 137.5 ; 132.2 ; 129.2 ; 128.8 ; 127.1 ; 122.3 ; 74.1 ; 20.2 ; 14.4.
2k	δ (CDCl ₃) = 7.51 (d, J=7.9 Hz, 1 H); 7.45-7.23 (m, 12 H); 7.10 (m, 1 H); 5.29 (s, 2 H).	δ (CDCl ₃) = 157.5 ; 137.5 ; 136.3 ; 133.2 ; 132.5 ; 129.3 ; 129.2 ; 128.8 ; 128.2 ; 128.0, 128.0 ; 127.2 ; 122.6 ; 75.7.





2b

