Supplementary Material

Typical experimental procedure:

*Synthesis of **1a***: To an ice-cooled solution of trifluoroacetic anhydride (13.3 ml; 90.1 mmol) in anhydrous acetonitrile (40 ml) is added dropwise a solution of sodium *O*-phenethyl xanthate (10g; 45.0 mmol) in anhydrous acetonitrile under an inert atmosphere. Once the addition is complete, the mixture is heated to reflux for 15 min., then three portions of lauroyl peroxide (907 mg; 4.5 mmol) are added at intervals of 1.5 hrs. The solvent is then evaporated under reduced pressure and the residue taken up in dichloromethane. The organic layer was washed with saturated sodium bicarbonate, dried and evaporated. Chromatography of the residue on silica (heptane) did not give a totally pure material, so further purification was accomplished by distillation in a Kugelruhr (80°C / 0.1 torr) to give the desired xanthate in 38% yield as a pale yellow oil.

General procedure for the radical additions to olefin: A solution of the xanthate (1mmol) and olefin (2-5 mmol) in 1,2-dichloroethane (ca 1 ml) is heated to reflux for 15 min, then lauroyl peroxide (2.5 mol%) are added every 1.5 hrs until almost complete consumption of the xanthate. The solvent is then removed under reduced pressure and the residue purified by chromatography on silica.

Dithiocarbonic acid-O-phenetyl ester S-trifluoromethyl ester 1a. ^{1}H NMR (200 MHz, $CDCl_3$) δ:7.39-7.23 (m, 5H arom.), 4.88 (t, *J* = 7.0 Hz, 2H, OC***H***$_2$), 3.15 (t, *J* = 7.0 Hz, $OCH_2C\boldsymbol{H}_2$). ^{13}C NMR (50 MHz, $CDCl_3$) δ: 201.3 (***C***=S), 136.5 (***C***q arom.), 129.0, 128.8, 127.1 (5 ***C***H arom), 126.8 (q, *J* = 311.4 Hz, ***C***F_3), 75.4 (O***C***H_2), 34.4 ($OCH_2\boldsymbol{C}H_2$). IR (cm^{-1}) ν: 3031 ν(Csp^3-H), 2955, 2924 ν(Csp^2-H), 1606, 1497 ν(C=C), 1455 δa(Csp^3-H, CH_2), 1382, 1271, 1237 ν(O-CS), 1164, 1119, 1030 ν(C=S), 951, 927, 905, 836. Anal. Calc. for $C_{10}H_9F_3OS_2$: C, 45.10, H, 3.41. Found: C, 45.33, H, 3.36. 38% yield (pale yellow oil).

Acetic acid 12.12.12-trifluoro-10-phenethyloxythiocarbonylsulfanyl-dodecyl ester 4a. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.34-7.22 (m, 5H, ***H*** arom.), 4.81 (t, *J* = 7.0 Hz, 2H, OC***H***$_2$$CH_2$Ph), 4.05 (t, *J* = 6.8 Hz, 2H, $CH_3COOC\boldsymbol{H}_2$), 3.93-3.84 (m, 1H, C***H***S), 3.11 (t, *J* = 7.0 Hz, OC***H***$_2$$CH_2$Ph), 2.67-2.32 (2m, 2H, C***HH***CF_3), 2.04 (s, 3H, C***H***$_3$), 1.82-1.27 (m, 16H, alkyl chain). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 212.7 (***C***=S), 171.3 (***C***=O), 137.1 (***C***q arom.), 129.0, 128.8, 126.9 (3 ***C***H arom.), 126.2 (q, $J_{C\text{-}F}$ = 279.8 Hz, ***C***F_3), 74.1 (O***C***H_2CH_2Ph), 64.7 ($CH_3COO\boldsymbol{C}H_2$), 44.4 (***C***HS), 38.6 (q, $J_{C\text{-}F}$ = 28.1 Hz, ***C***H_2CF_3), 34.6, 32.9, 29.4, 29.3, 28.7, 26.6, 26.0 (7***C***H_2), 21.1 (***C***H_3). IR (cm^{-1}) : 2929, 2857 ν(Csp^3-H), 1737 ν(C=O), 1605, 1498, 1455 ν(C=C), 1433 δa (C-H), 1368 δs (C-H, CH_3CO), 1243 ν(O-C=S), 1178, 1141, 1062 ν(C=S), 908, 839, 750, 700. Anal. Calc. for $C_{23}H_{33}F_3O_3S_2$: C, 57.22, H, 6.95. Found: C, 57.91, H, 6.94. 82% yield (colorless oil).

Dithiocarbonic acid O-phenethyl ester S-(3.3.3-trifluoro-1-trimethylsilanyl) ester 4b. ^{1}H NMR (250 MHz, $CDCl_3$) δ: 7.18-7.03 (m, 5H, ***H*** arom.), 4.64 (t, *J* = 7.2 Hz, 1H, OC***H***H), 4.63 (t, *J* = 7.2 Hz, 1H, OCH***H***), 3.17 (dd, *J* = 4.4 Hz, *J* = 8.0 Hz, 1H, C***H***S), 2.95 (t, *J* = 7.1 Hz, 2H, OC***H***$_2$$CH_2$), 2.38-2.11 (m, 2H, C***H***$_2$$CF_3$), -0.52 (s, 9H, Si(C***H***$_3$)$_3$. ^{13}C NMR (62.5 MHz, $CDCl_3$) δ: 214.0 (***C***=S), 137.2 (***C***q arom.), 129.0, 128.7, 126.9 (3 ***C***H arom.), 74.4 (O***C***H_2CH_2Ph), 126.7 (q, $J_{C\text{-}F}$ = 277.2 Hz, CF_3), 35.2 (q, $J_{C\text{-}F}$ = 28.5 Hz, ***C***H_2CF_3), 34.6

($OCH_2\boldsymbol{C}H_2Ph$), 29.3 (***C***HS), -2.6 ($3\boldsymbol{C}H_3$). IR (cm^{-1}) ν :2956 ν(Csp^3-H), 1605, 1498, 1455 ν(C=C), 1433, 1290, 1255 δ (Si-CH_3), 1231 ν(O-CS), 1179, 1140, 1060 ν(C=S), 916, 848, 750. Anal. Calc. for $C_{15}H_{21}F_3OS_2$ Si : C, 49.15, H, 5.77. Found: C, 49.03, H, 5.63. MS (CI, NH_3) *m/z*: 367 $(M+H)^+$, 384 $(M+NH_4)^+$. 44% yield (colorless oil).

Dithiocarbonic acid *O*-phenethyl ester *S*-(3.3.3-trifluoro-1-trimethylsilanyl-methyl-propyl) ester 4c. ^{1}H NMR (250 MHz, $CDCl_3$) δ: 7.27-7.14 (m, 5H, ***H*** arom.), 4.73 (t, *J* = 7.0 Hz, 2H, $OC\boldsymbol{H_2}CH_2Ph$), 3.92-3.80 (m, 1H, C***H***S), 3.03 (t, *J* = 7.0 Hz, 2H, $OCH_2C\boldsymbol{H_2}Ph$), 2.56 (dqd, *J* = 4.7 Hz, *J* = 10.9 Hz, *J* = 15.2 Hz, 1H, C***H***HCF_3), 2.30 (dqd, *J* = 8.2 Hz, *J* = 10.3 Hz, *J* = 15.2 Hz, 1H, CH***H***CF_3), 1.10 (dd, *J* = 5.4 Hz, *J* = 15.4 Hz, SiC***H***H), 0.93 (dd, *J* = 10.0 Hz, *J* = 15.4 Hz, SiCH***H***), -0.02 (s, 9H, $Si(C\boldsymbol{H_3})_3$). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 212.6 (***C***=S), 137.1 (***C***q arom.), 129.0, 128.8, 127.0 (3***C***H arom.), 125.9 (q, $J_{C\text{-}F}$ = 277.8 Hz, ***C***F_3), 74.0 ($O\boldsymbol{C}H_2CH_2Ph$), 41.7 (q, $J_{C\text{-}F}$ = 27.0 Hz, ***C***H_2CF_3), 41.5 (***C***HS), 34.6 ($OCH_2\boldsymbol{C}H_2Ph$), 21.4 ($\boldsymbol{C}H_2SiMe_3$), -0.8 ($Si(\boldsymbol{C}H_3)_3$). IR (cm^{-1}) ν : 3066, 3031 ν(Csp2-H), 2954, 2856 ν(Csp^3-H), 1606, 1498, 1455 ν(C=C), 1431 δa(C-H), 1371, 1329, 1251 δ(Si-CH_3), 1220 ν(O-CS), 1177, 1138, 1086, 1064 ν(C=S), 986, 839, 749. MS (CI, NH_3) *m/z*: 381 $(M+H)^+$. 398 $(M+NH_4)^+$. 61% yield (colorless oil).

4.4.4-trifluoro-2-phenethyloxythiocarbonylsulfanyl-butyl)-phosphonic acid diethyl ester 4d. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.35-7.22 (m, 5H, ***H*** arom.), 4.81 (t, *J* = 7.1 Hz, 2H, $OC\boldsymbol{H_2}CH_2Ph$), 4.23-4.06 (m, 5H, C***H***S + 2 OCH_2CH_3), 3.12 (t, *J* = 7.1 Hz, 2H, $OCH_2C\boldsymbol{H_2}Ph$), 2.98-2.80 (m, 1H, C***H***HCF_3), 2.71-2.52 (m, 1H, CH***H***CF_3), 2.35 (ddd, *J* = 7.9 Hz, *J* = 15.7 Hz, *J* = 19.4 Hz, 1H, C***H***$HP(O)(OEt)_2$), 2.25 (ddd, *J* = 7.9 Hz, *J* = 15.7 Hz, *J* = 17.4 Hz, 1H, CH***H***$P(O)(OEt)_2$), 1.34, 1.33 (2t, *J* = 7.0 Hz, 6H, 2 $OCH_2C\boldsymbol{H_3}$). ^{13}C NMR (75 MHz, $CDCl_3$) δ : 211.5 (***C***=S), 136.9 (***C***q arom.), 128.9, 128.7, 127.6 (3 ***C***H arom.), 125.7 (q, $J_{C\text{-}F}$ = 275.9 Hz, ***C***F_3), 74.3 ($O\boldsymbol{C}H_2Ph$), 62.23, 62.15 (2 $O\boldsymbol{C}H_2CH_3$), 38.8 (***C***HS), 37.4 (q, *J* = 24.2 Hz, ***C***H_2CF_3), 34.6 ($OCH_2\boldsymbol{C}H_2Ph$), 30.6 (q, $J_{C\text{-}P}$ = 138.0 Hz, ***C***H_2P), 16.5, 16.4 (2 $OCH_2\boldsymbol{C}H_3$). IR (cm^{-1}) ν : 3030 ν(Csp^2-H), 2984 ν(Csp^3-H), 1605, 1498, 1455 ν(C=C), 1391 δs(Csp^3-H), 1245 ν(O-CS), 1175, 1141, 1049 ν(C=S), 966, 860, 793, 700. Anal. Calc. for $C_{17}H_{24}F_3O_4S_2$ P: C, 45.94, H, 5.44. Found: C, 45.81, H, 5.47. MS (CI, NH_3) *m/z*: 445 $(M+H)^+$, 462 $(M+NH_4)^+$. 60% yield (colorless oil).

Dithiocarbonic acid *S*-[1-(dodecanoylamino-methyl)-3.3.3-trifluoro-propyl]-ester *O*-phenethyl ester 4e ^{1}H NMR (250 MHz, $CDCl_3$) δ: 7.37-7.23 (m, 5H, ***H*** arom.), 5.80 (bt, *J* = 6.1 Hz, 1H, N***H***), 4.85-4.76 (m, 2H, $OC\boldsymbol{H_2}CH_2Ph$), 4.00 (quint., *J* = 6.5 Hz, 1H, C***H***S), 3.69-3.58 (m, 1H, NC***H***H), 3.50-3.39 (m, 1H, NCH***H***), 3.12 (t, *J* = 7.0 Hz, $OCH_2C\boldsymbol{H_2}Ph$), 2.59-2.39 (m, 2H, C***HH***CF_3), 1.60 (t, *J* = 6.8 Hz, 2H, -$COCH_2$-), 1.62-1.57 (m, 2H, CH_2), 1.26 (bs, 16H, $8CH_2$), 0.88 (t, *J* = 6.5 Hz, 3H, CH_3). ^{13}C NMR (62.5 MHz, $CDCl_3$) δ: 211.6 (***C***=S), 173.7 (***C***=O), 137.0 (***C***q arom.), 128.9, 128.8, 127.0 (3 ***C***H arom.), 125.7 (q, $J_{C\text{-}F}$ = 275.8 Hz, ***C***F_3), 74.4 ($O\boldsymbol{C}H_2$), 44.5 (***C***HS), 41.9, 36.7 (2 ***C***H_2), 36.1 (q, $J_{C\text{-}F}$ = 28.6 Hz, ***C***H_2CF_3), 34.5, 32.0, 29.7, 29.6, 29.4, 25.7, 22.7 (7 ***C***H_2), 14.2 (***C***H_3). IR (cm^{-1}) ν: 3292 ν(N-H), 3067, 3031 ν(Csp^2-H), 2926, 2855 ν(Csp^3-H), 1651 ν(C=O), 1550 ν(N-CO), 1498 ν(C=C), 1456, 1381 δs(CH_3), 1263-1229 ν(O-CS), 1147, 1062 ν(C=S), 900, 834, 749. Anal. Calc. for $C_{25}H_{38}F_3NO_2S_2$ C, 59.38, H, 7.57. Found: C, 59.11, H, 7.42. 67% yield (colorless oil).

2-Acetylamino-2-(4.4.4-trifluoro-2-phenethyloxythiocarbonylsulfanyl-butyl)-malonic acid diethyl ester 4f. ^{1}H NMR (250 MHz, $CDCl_3$) δ: 7.36-7.23 (m, 5H, H arom.), 6.81 (bs, 1H, N***H***), 4.90-4.75 (m, 2H, $OC\boldsymbol{H_2}CH_2Ph$), 4.29-4.10 (m, 4H, $2COOC\boldsymbol{H_2}CH_3$), 3.84-3.74 (m, 1H, C***H***S), 3.12 (t, *J* = 6.9 Hz, $OCH_2C\boldsymbol{H_2}Ph$), 3.01 (dd, *J* = 2.4 Hz, *J* = 15.8 Hz, 1H, NH-

C***H***H), 2.73 (dd, *J* = 11.1 Hz, *J* = 15.8 Hz, 1H, NH-CH***H***), 2.61-2.34 (m, 2H, CF_3C***HH***), 1.99 (s, 3H, COC***H*****$_3$**), 1.25, 1.24 (2t, *J* = 7.1 Hz, 6H, 2 $COOCH_2C$***H*****$_3$**). ^{13}C NMR (62.5 MHz, $CDCl_3$) δ: 211.7 (***C***=S), 169.5 (***C***OCH_3), 167.7, 167.2 (2 ***C***O_2Et), 136.9 (***C***q. arom.), 128.9, 128.7, 126.9 (3 ***C***H arom.), 125.5 (q, $J_{C\text{-}F}$ = 276.9 Hz, ***C***F_3), 74.4 (O***C***H_2CH_2Ph), 65.1 (***C***q), 63.2, 62.9 (2 COO***C***H_2CH_3), 40.4 (q, $J_{C\text{-}F}$ = 27.6 Hz, ***C***H_2CF_3), 40.0 (***C***HS), 34.6, 34.5 (NH-***C***H_2 + OCH_2***C***H_2Ph), 22.9 (CO***C***H_3), 13.9, 13.8 (2 $COOCH_2$***C***H_3). IR (cm^{-1}) ν: 3401 ν(N-H), 3030, 2984, 1739, 1682 ν(C=O), 1605, 1583, 1496, 1445 ν(C=C), 1372 ν(C-O-C), 1223 ν(O-CS), 1140 ν(C-O-C), 1061 ν(C=S), 955, 860, 751, 701. MS (CI, NH_3) *m/z*: 524 $(M+H)^+$, 541 $(M+NH_4)^+$. 60% (80%) yield (pale yellow oil).

Acetic acid 4.4.4-trifluoro-2-phenethyloxythiocarbonylsulfanyl-butyl ester 4g. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.34-7.21 (m, 5***H*** arom.), 4.81 (t, *J* = 6.9 Hz, 2H, OC***H*****$_2$**), 4.31 (dd, *J* = 4.8 Hz, *J* = 11.7 Hz, 1H, C***H***$HOCOCH_3$), 4.25 (dd, *J* = 5.3 Hz, *J* 11.7 Hz, 1H, CH***H***$OCOCH_3$), 4.19-4.11 (m, 1H, C***H***S), 3.11 (t, *J* = 6.9 Hz, 2H, OCH_2C***H*****$_2$**), 2.65-2.46 (m, 2H, C***H*****$_2CF_3$**), 2.07 (s, 3H, C***H*****$_3$**). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 211.0 (***C***=S), 170.3 (***C***=O), 136.9 (***C***q arom.), 128.9, 128.8, 127.0 (3***C***H arom.), 125.6 (q, $J_{C\text{-}F}$ = 276.2 Hz, ***C***F_3), 74.5 (O***C***H_2CH_2Ph), 64.4 (CO-O***C***H_2), 42.7 (***C***HS), 35.2 (q, $J_{C\text{-}F}$ = 28.8 Hz, ***C***H_2CF_3), 34.5 (OCH_2***C***H_2Ph), 20.6 (***C***H_3). IR (cm^{-1}) ν: 3066, 3031 ν(Csp^2-H), 2955 ν(Csp^3-H), 1749 ν(C=O), 1605, 1498, 1455 ν(C=C), 1434 δ(C-H), 1384 δs(C-H, CH_3), 1232 ν(O-CS), 1148, 1058 ν(C=S), 978, 834, 750, 700. Anal. Calc. for $C_{15}H_{17}F_3O_3S_2$: C, 49.17, H, 4.68 . Found: C, 48.91, H, 4.84. 55% yield (pale yellow oil).

Dithiocarbonic acid *S*-(1-cyanomethyl-3.3.3-trifluoro-propyl) ester *O*-phenetyl ester 4h. ^{1}H NMR (250 MHz, $CDCl_3$) δ: 7.36-7.21 (m, 5H, ***H*** arom.), 4.81 (t, *J* = 6.9 Hz, 2H, OC***H*****$_2$**CH_2Ph), 4.07 (ddd, *J* = 5.6 Hz, *J* = 7.6 Hz, *J* = 11.5 Hz, 1H, C***H***S), 3.10 (t, *J* = 6.9 Hz, 2H, OCH_2C***H*****$_2$**Ph), 2.87 (dd, *J* = 5.3 Hz, *J* = 17.4 Hz, 1H, C***H***HCN), 2.79 (dd, *J* = 5.3 Hz, *J* = 17.4 Hz, 1H, CH***H***CN), 2.69-2.53 (m, 2H, C***H*****$_2CF_3$**). ^{13}C NMR (62.5 MHz, $CDCl_3$) δ: 209.8 (***C***=S), 136.8 (***C***q arom.), 128.9, 128.8, 127.0 (3 ***C***H arom.), 125.1 (q, $J_{C\text{-}F}$ = 276.2 hz, ***C***F_3), 116.1 (***C***≡N), 74.8 (O***C***H_2CH_2Ph), 39.7 (***C***HS), 36.5 (q, $J_{C\text{-}F}$ = 29.3 Hz, ***C***H_2CF_3), 34.4 (OCH_2***C***H_2Ph), 23.0 (***C***H_2CN). IR (cm^{-1}) ν: 3065, 3030, 2954, 2251 ν(C≡N), 1604, 1498, 1455 ν(C=C), 1433, 1384, 1336, 1317, 1250 ν(O-CS), 1148, 1111, 1058 ν(C=S), 992, 932, 751, 701. Anal. Calc. for $C_{14}H_{14}F_3NOS_2$: C, 50.44, H, 4.23. Found: C, 50.61, H, 4.34. 64% yield (colorless oil).

Dithiocarbonic acid *S*-(1-benzenesulfonyl-3.3.3-trifluoro-propyl)ester *O*-phenethyl ester 4i. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.91 (d, *J* = 5.9 Hz, 2H, C***H*** arom.), 7.63 (t, *J* = 7.2 Hz, 1H, C***H*** arom.), 7.47 (t, *J* = 7.9 Hz, 2H, C***H*** arom.), 7.38-7.23 (m, 3H, C***H*** arom.), 7.18 (d, *J* = 6.8 Hz, 2H, C***H*** arom.), 5.42 (dd, *J* = 1.9 Hz, *J* = 11.1 Hz, 1H, C***H***S), 4.67 (dt, *J* = 6.7 Hz, *J* = 10.8 Hz, 1H, OC***H***H-CH_2), 4.46 (dt, *J* = 7.1 Hz, *J* = 10.8 hz, 1H, OCH***H***-CH_2), 3.27 (dqq, *J* = 2.1 Hz, *J* = 9.7 Hz, *J* = 15.5 Hz, 1H, C***H***HCF_3), 2.98 (t, *J* = 6.9 Hz, 2H, OCH_2C***H*****$_2$**), 2.71-2.56 (m, 1H, CH***H***CF_3). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 207.1 (***C***=S), 136.8, 135.2 (2 ***C***q arom.), 134.7, 130.3, 129.2, 129.0, 128.9, 127.2 (10 ***C***H arom.), 125.1 (q, $J_{C\text{-}F}$ = 276.3 Hz, ***C***F_3), 75.5 (O***C***H_2CH_2), 65.2 (***C***HS), 34.5 (OCH_2***C***H_2), 32.0 (q, $J_{C\text{-}F}$ = 30.9 Hz, ***C***H_2CF_3). IR (cm^{-1}) ν: 3065, 3031 ν(Csp^2-H), 2955, 2927, 2856 ν(Csp^3-H), 1604, 1585, 1498 ν(C=C), 1448, 1433 δa (C-H), 1381, 1329, 1302, 1260 ν(O-CS) + ν(S=O), 1188, 1153 ν(S=O), 1107, 1084, 1050 ν(C=S), 1000, 985, 955, 923, 848, 749. 12%(17%) yield (colorless oil).

Dithiocarbonic acid *O*-phenethylester S-(3.3.3-trifluoro-1-([(4-fluoro-phenyl)-methanesulfonyl-amino]-methyl)-propyl) ester 4j. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.55-

7.04 (m, 9***H*** arom.), 4.72 (t, *J* = 6.9 Hz, 2H, OC***H*****$_2$**), 4.01-3.66 (m, 3H, NC***H*****$_2$** + C***H***S), 3.04 (t, *J* = 6.9 Hz, 2H, OCH_2C***H*****$_2$**), 2.87 (s, 3H, SO_2C***H*****$_3$**), 2.82-2.70 (m, 1H, CF_3C***H***H), 2.59-2.32 (m, 1H, CF_3CH***H***). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 211.0 (***C***=S), 162.5 (d, $J_{C\text{-}F}$ = 248.0 Hz, 2 ***C***H arom.), 136.9, 133.9 (2 ***C***q arom.), 130.8 (d, $J_{C\text{-}F}$ = 8.6 Hz, 2 ***C***H arom.), 129.0, 128.8, 127.0 (3 ***C***H arom.), 125.7 (q, $J_{C\text{-}F}$ = 276.1 Hz, ***C***F_3), 116.8 (d, $J_{C\text{-}F}$ = 22.6 Hz, 2***C***H arom.), 74.4 (O***C***H_2), 53.1 (***C***H_2N), 42.2 (***C***HS), 37.3 (q, $J_{C\text{-}F}$ = 28.7 Hz, ***C***H_2CF_3), 34.4 (***C***H_2Ph). IR (cm^{-1}) ν: 2930 ν(Csp^3-H), 1602, 1507 ν(C=C), 1455 δa(Csp^2-H), 1387, 1346 ν(SO_2Me), 1236, 1153 ν(S=O), 1058 ν(C=S), 963, 871, 840, 812, 762, 701. Anal. Calc. for $C_{20}H_{21}F_4NO_3S_3$: C, 48.47, H, 4.27. Found: C, 47.94, H, 4.32. MS (CI, NH_3) *m/z*: 513 $(MNH_4)^+$. 64% yield (colorless oil).

5-Fluoro-1-methanesulfonyl-3-(2.2.2-trifluoro-ethyl)-2.3-dihydro-1*H*-indole 10. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.38 (dd, *J* = 4.4 Hz, *J* = 8.7 Hz, Cq-CH-C***H***-CF), 7.00-6.91 (m, 2H, C***H*** arom.), 4.22 (dd, *J* = 8.9 Hz, *J* = 9.9 Hz, C***H***HN), 3.81-3.68 (m, 2H, CH***H***N + C***H***CH_2N), 2.89 (s, 3H, SO_2C***H*****$_3$**), 2.71-2.54 (m, 1H, C***H***HCF_3), 2.47-2.29 (m, 1H, CH***H***CF_3). ^{13}C NMR (75 MHz, $CDCl_3$) δ: 159.8 (d, $J_{C\text{-}F}$ = 242.0 Hz, ***C***qF), 137.7 (***C***q-CH-CHCF), 134.0 (d, $J_{C\text{-}F}$ = 7.6 Hz, ***C***q-CH-CF), 126.0 (q, $J_{C\text{-}F}$ = 275.6 Hz, ***C***F_3), 115.8 (d, $J_{C\text{-}F}$ = 23.5 Hz, ***C***H-CF), 115.1 (d, $J_{C\text{-}F}$ = 8.2 Hz, ***C***H-CH-CF), 112.0 (d, $J_{C\text{-}F}$ = 24.4 Hz, ***C***H-CF), 56.4 (***C***H_2N), 38.2 (q, $J_{C\text{-}F}$ = 28.0 Hz, ***C***H_2-CF_3), 34.8 (SO_2***C***H_3 + ***C***HCH_2N). IR (cm^{-1}) ν: 1610 ν(C=C), 1488 δa (Csp_3-H), 1334 ν(SO_2Me), 1255, 1179, 1153, 1068, 1011, 970, 892, 870, 822, 782. HRMS. Calc. for $C_{11}H_{11}F_4NO_2S$: 297.0452. Found: 297.0447. MS (CI, NH_3) *m/z*: 298 $(M+H)^+$, 315 $(M+NH_4)^+$. 60% yield (colorless oil).