**2-(3,4-Difluorophenyl)-2-((trimethylsilyl)oxy)acetonitrile, OSM-S-226**



Representative Example: http://malaria.ourexperiment.org/uri/486

Freshly dried zinc chloride (0.96 g, 7.00 mmol) was weighed into an oven-dried flask under Ar and 3,4-difluorobenzaldehyde (1.00 g, 7.00 mmol) in CH2Cl2 (6 mL) was added at 0 ˚C. Trimethylsilyl cyanide (0.70 g, 0.90 mL, 7.00 mmol) was added at 0 ˚C and the reaction mixture stirred in an ice bath for 30 min before being allowed to warm to rt whilst stirring overnight. The reaction mixture was poured over water (12 mL), extracted with EtOAc (3 × 20 mL), dried (MgSO4), filtered and evaporated to give the crude title compound as a straw coloured oil (1.38 g, X%) containing a 0.1:1:0.4 mixture of starting material: 2-(3,4-difluorophenyl)-2-hydroxyacetonitrile: **OSM-S-266**. The oil was used as crude in the next reaction; **1H NMR** (200 MHz, CDCl3) δ: 7.44–7.18 (3H, m), 5.54 (1H, s), 0.25 (3H, s).

*FC1=C(F)C=C(C(C#N)O[Si](C)(C)C)C=C1*

*InChI=1S/C11H13F2NOSi/c1-16(2,3)15-11(7-14)8-4-5-9(12)10(13)6-8/h4-6,11H,1-3H3*

Data in accordance with CRO briefing document.[[1]](#endnote-1) Procedure adapted from the literature.[[2]](#endnote-2)

1. CRO Briefing Document Link [↑](#endnote-ref-1)
2. Massolini G, Fracchiolla G, Calleri E, Carbonara G, Temporini C, Lavecchia A, Cosconati S, Novellino E, Loiodice F (2006) Elucidation of the enantioselective recognition mechanism of a penicillin G acylase-based chiral stationary phase towards a series of 2-aryloxy-2-arylacetic acids. *Chirality*, 18:633–643. (10.1002/chir.20300) [↑](#endnote-ref-2)