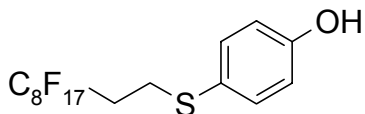


## 4-(1H,1H,2H,2H-Perfluorodecyl-1-thio)phenol



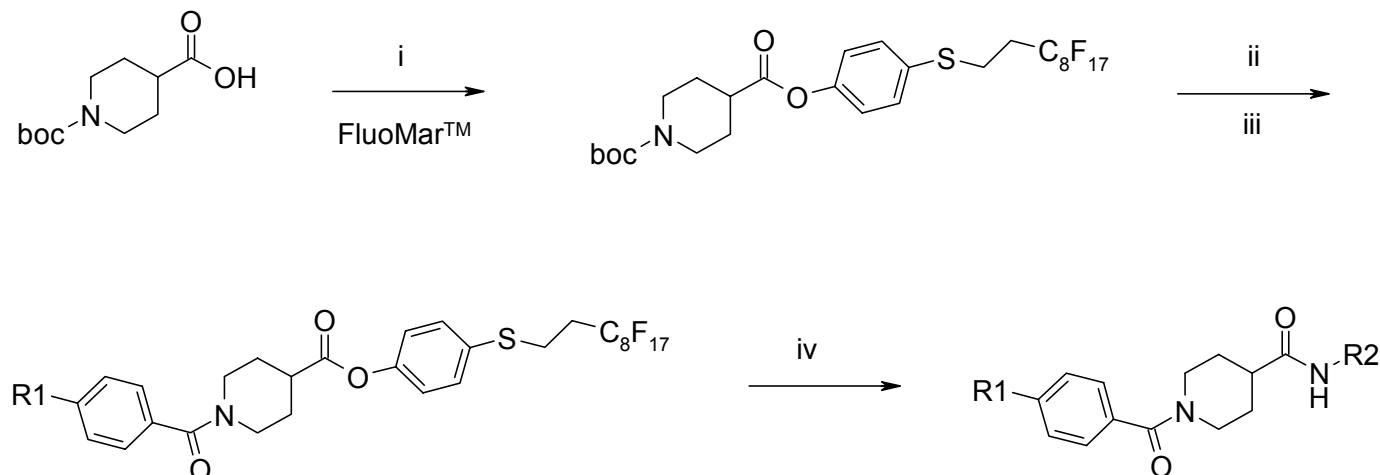
Chemical Formula:	C <sub>16</sub> H <sub>9</sub> 4F <sub>17</sub> OS
Formula Weight:	572.28
Description:	Reagent
CAS Number:	142623-70-9
Appearance:	White, free-flowing solid
Melting Point:	95-97°C
Soluble in:	Dichloromethane, chloroform, THF, ether, toluene and most other typical organic solvents
Stability:	Stable in air

**DESCRIPTION AND USES<sup>1</sup>:**

- Fluorous equivalent of the Marshall resin used frequently as a carbonate and carbamate linker in solid phase syntheses<sup>2</sup>
- Reagent can be used as an alternative to the Marshall resin in solution phase combinatorial and parallel synthesis
- Tagging of substrates are achieved with traditional reaction conditions with the advantage that products or intermediates containing the tag (FluoMar) can easily be separated from organic reagents, reactants or products by performing a quick fluororous solid phase extraction over FluoroFlash® silica gel.<sup>3,4</sup>

**TYPICAL TAGGING PROCEDURE<sup>1</sup>:**

To a mixture of FluoMar (0.5 mmol, 1.0 equiv), *N*-Boc-isonipecotic acid (0.75 mmol, 1.5 equiv) and DMAP (0.05 mmol, 0.1 equiv) is added dry DMF (5 ml), DIC (diisopropyl carbodiimide) (0.75 mmol, 1.5 equiv) and the mixture is stirred at 22°C for 8 hrs. The crude mixture is loaded directly onto a FluoroFlash cartridge for purification. <sup>4</sup> Examples of reactions performed with FluoMar-tagged substrates are shown (ii – iv).<sup>1</sup>



i) DIC, DMAP, DMF, RT, 8 h; ii) TFA, CH<sub>2</sub>Cl<sub>2</sub>, RT, 2 h; iii) Acid chloride, Et<sub>3</sub>N, RT, 8h; iv) Amine, THF, 60°C, 5 h

**RELATED REAGENTS:**

F017027, the C<sub>8</sub>F<sub>17</sub> analog, has appropriate fluorine content for tagging of diverse organic molecules and is recommended for natural products or medicinal chemistry synthesis in combination with fluorous solid phase extraction. The other FluoMar homologs are useful in fluorous chromatography or fluorous mixture synthesis.

Additional FluoMar™ Homologs Available	
Rf	Catalog No.
C <sub>3</sub> F <sub>7</sub>	F007027
C <sub>4</sub> F <sub>9</sub>	F009027
C <sub>6</sub> F <sub>13</sub>	F013027
C <sub>10</sub> F <sub>21</sub>	F021027

**REFERENCES:**

- 1) Chen, C.H.-T.; Zhang, W. *Organic Letters* **2003**, 5, 1015.
- 2) Marshall, D.L.; Liener, I.E. *J. Org. Chem.* **1970**, 35, 867.
- 3) Curran, D.P. *Synlett* **2001**, 1488.
- 4) Please refer to FTI Application Note "Fluorous Solid Phase Extraction"

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