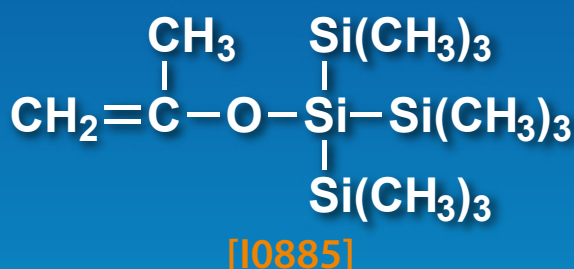


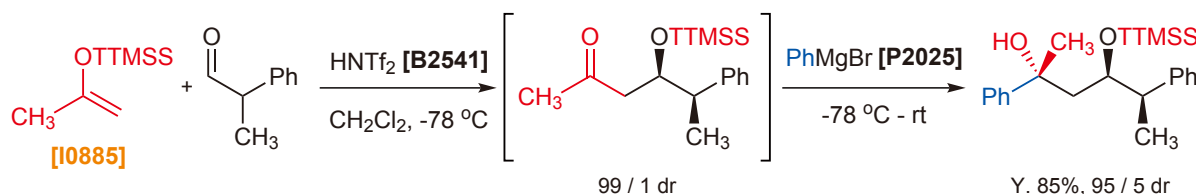
# Silyl Enol Ether Usable for Highly Stereoselective Aldol Reactions



## Advantages

- Silyl Enol Ether with a Sterically Hindered Tris(trimethylsilyl)silyl (TTMSS) Group
- Stereoselective Aldol Reaction Proceeds by the TTMSS Group

## Application



M. B. Boxer, M. Akakura, H. Yamamoto, *J. Am. Chem. Soc.* **2008**, *130*, 1580.

### Experimental procedure:

A flask is charged with **I0885** (100 mg, 0.34 mmol) and 2-phenylpropanal (46  $\mu\text{L}$ , 0.34 mmol) which are dissolved in dichloromethane (1.5 mL). The solution is cooled with stirring to  $-78\text{ }^\circ\text{C}$ , and HNTf<sub>2</sub> (68  $\mu\text{L}$  of a 5 mmol/L dichloromethane solution) is added via syringe. The resulting light yellow solution is stirred for 15 min at  $-78\text{ }^\circ\text{C}$ . Phenyl magnesium bromide (680  $\mu\text{L}$  of a 1.0 mol/L THF solution) is added dropwise over 10 minutes. The solution is stirred at  $-78\text{ }^\circ\text{C}$  for 1 h and allowed to warm to room temperature. The reaction is then quenched with NH<sub>4</sub>Cl (aq.) (2 mL) and diluted with hexane (5 mL). The organic layer is washed 3 times with NH<sub>4</sub>Cl (aq.), once with brine and dried over sodium sulfate. Concentration and column chromatography on silica (hexane:EtOAc = 99:1) gives the three component adduct as a colorless oil (85% yield).

## I0885 Isopropenyloxytris(trimethylsilyl)silane

1g

### Related Products

<b>B2541</b> Bis(trifluoromethanesulfonyl)imide (= HNTf <sub>2</sub> )	5g /25g
<b>P2025</b> Phenylmagnesium Bromide (16% in Tetrahydrofuran, ca. 1 mol/L)	250g
<b>C2411</b> Tris(trimethylsilyl)silyl Chloride	5g

This material was produced by collaboration with Prof. Hisashi Yamamoto, Chubu University.

For further information please refer to our website at [www.TCIchemicals.com](http://www.TCIchemicals.com).

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