Silyl Enol Ether Usable for Highly Stereoselective Aldol Reactions

**Application**

Experimental procedure:
A flask is charged with **I0885** (100 mg, 0.34 mmol) and 2-phenylpropanal (46 µL, 0.34 mmol) which are dissolved in dichloromethane (1.5 mL). The solution is cooled with stirring to –78 °C, and HNTf₂ (68 µL of a 5 mmol/L dichloromethane solution) is added via syringe. The resulting light yellow solution is stirred for 15 min at –78 °C. Phenyl magnesium bromide (680 µL of a 1.0 mol/L THF solution) is added dropwise over 10 minutes. The solution is stirred at –78 °C for 1 h and allowed to warm to room temperature. The reaction is then quenched with NH₄Cl (aq.) (2 mL) and diluted with hexane (5 mL). The organic layer is washed 3 times with NH₄Cl (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

**Related Products**

- **B2541** Bis(trifluoromethanesulfonylimide (= HNTf₂)
- **P2025** Phenylmagnesium Bromide (16% in Tetrahydrofuran, ca. 1mol/L)
- **C2411** Tris(trimethylsilyl)silyl Chloride

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

For further information please refer to our website at www.TCIchemicals.com.