

A Soluble Polymer-Supported Triflating Reagent: A High-Throughput Synthetic Approach To Aryl and Enol Triflates

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Supporting Information

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General Procedures (Synthesis). As described previously (Lo, C.-H. L.; Wentworth Jr., P.; Jung, K. W.; Yoon, J.; Ashley, J. A.; Janda, K. D. *J. Am. Chem. Soc.* **1997**, *119*, 10251-10252). *N*-Phenyltrifluoromethanesulfonimide was purchased from Aldrich Chemical Co. and used without further purification.

Regioselective Enol Triflate Formation.

Typical Experimental Procedure, As For Cyclohexanone enol triflate (Wulff, W. D. *et al J. Org.Chem.* **1986**, *51*, 279). To a vigorously stirred solution of LDA (0.4 mL, 2 M in THF) in dimethoxyethane (DME, 2.5 mL) at $-78\text{ }^{\circ}\text{C}$, was added a solution of freshly distilled cyclohexanone (0.7 mmol) in DME (2.5 mL). The resultant mixture was stirred for 2 h at $-78\text{ }^{\circ}\text{C}$, then a cold ($-78\text{ }^{\circ}\text{C}$) suspension of **1** (1.5 g, 0.9 mmol) in DME (10 mL) was added dropwise. The reaction mixture was then allowed to warm to $0\text{ }^{\circ}\text{C}$ at which point the mixture becomes homogeneous. The resulting solution was stirred for 8 h at that temperature, then concentrated to half volume *in vacuo* and added dropwise to vigorously stirring diethyl ether (150 mL). The resulting precipitate was removed by filtration and the mother liquor was concentrated to dryness to give a pale yellow residue. This residue was dissolved in dichloromethane (0.5 mL), added to a silica plug and the enol triflate was eluted with dichloromethane. The solvent was removed *in vacuo* to give the enol triflate as a colorless oil (153 mg, 95 %). The product possessed satisfactory spectral data (Wulff, W. D. *et al J. Org. Chem.* **1986**, *51*, 279).