

## Category

**Metal-Catalyzed Asymmetric Synthesis and Stereoselective Reactions**

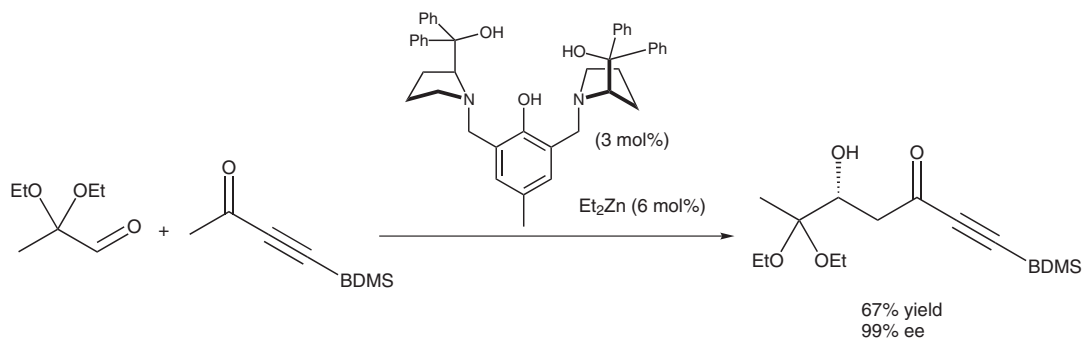
Synthesis of Natural Products and Drugs

## Key Words

direct aldol addition  
dinuclear zinc  
formal synthesis

B. M. TROST,\* M. U. FREDERIKSEN, J. P. N. PAPILLON, P. E. HARRINGTON, S. SHIN, B. T. SHIREMAN (STANFORD UNIVERSITY, USA)  
Dinuclear Asymmetric Zn Aldol Additions: Formal Asymmetric Synthesis of Fostriecin  
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# Direct Dinuclear Zinc Aldol Addition



**Significance:** This paper utilizes the author's previously reported direct aldol addition in the formal asymmetric syntheses of fostriecin. The use of alkynyl methyl ketones as an enolate precursor was recently reported by this group and has now been used in the studies of natural product synthesis.

**Comment:** The dinuclear Zn catalyst has been shown as an excellent catalyst for one of the most interesting transformations, the direct aldol condensation. This catalyst is able to give perfect enantioselectivity. The authors also exemplify the utility of the Pd-catalyzed vinyl silane cross-coupling during the formal synthesis.

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