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 $C_1$ -Symmetric Rh/Phebox-Catalyzed Asymmetric Alkynylation of  $\alpha$ -Ketoesters *Angew. Chem. Int. Ed.* **2011**, *50*, 6296-6300.

## Asymmetric Rhodium-Catalyzed Synthesis of Tertiary Propargyl Alcohols

**Significance:** In contrast to the results of reacting aldehydes, there have been a limited number of examples that demonstrate a chemoselective and highly asymmetric alkynylation of ketones. The authors report a Rh/Phebox-catalyzed alkynylation of  $\alpha$ -keto esters. A variety of alkynes are utilized in generally good yields with good to excellent enantioselectivities.

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 Synfacts 2011, 9, 0967-0967
 Published online: 19.08.2011

 DOI: 10.1055/s-0030-1261004; Reg-No.: L08711SF

**Comment:** A highly enantioselective Rh/Phebox-catalyzed process is reported for the synthesis of chiral tertiary propargyl alcohols. Yields are generally good to excellent and enantioselectivities are generally moderate to excellent. The chemoselective nature of this reaction is particularly noteworthy, as aldehydes and other functional groups are tolerated.

## Category

Metal-Catalyzed Asymmetric Synthesis and Stereoselective Reactions

## Key words

asymmetric alkynylation

rhodium catalysis

C<sub>1</sub>-symmetric Phebox ligands

chiral propargyl alcohols

α-keto esters

