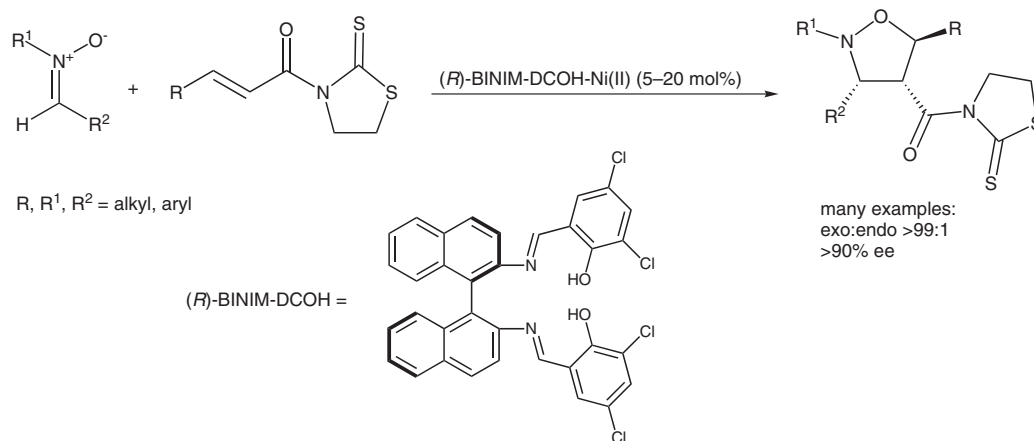


H. SUGA,* T. NAKAJIMA, K. ITOH, A. KAKEHI (SHINSHU UNIVERSITY, NAGANO, JAPAN)
Highly *Exo*-Selective and Enantioselective Cycloaddition Reactions of Nitrones Catalyzed by a Chiral Binaphthylidimine–Ni(II) Complex
Org. Lett. **2005**, *7*, 1431-1434.

Exo-Selective Enantioselective Nitrono Cycloaddition



Significance: 1,3-Dipolar cycloadditions of nitrones and olefins are excellent means for the construction of isoxazolidines as well as γ -amino alcohols. This paper describes a Ni(II) catalyst that provides exceedingly high *exo*-selectivity accompanied by excellent enantioselectivities with catalyst loadings as low as 5 mol%.

Comment: Chiral amino alcohols are important building blocks in many bio-active compounds. This communication is a standout example in that perfect *exo*-selectivity was obtained in many cases. The use of thiazolidinethiones as key substrates in the Binim-DCOH-Ni(II) (structure not known) catalyzed reaction also has interesting implications in the catalyst structure and function.

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