1) Me_2Zn (1.2 eq), CuTC (0.01 eq)
chiral ligand (0.01 eq)
MTBE, 0°C, 3h

2) $H_2C{=}CHCH_2OAc$ (1.5 eq)
$Fe_2(CO)_9$ (0.1 eq), Ph_3P (0.1 eq)
r.t. 4h

(80%)

(12.39)