Organic Chemistry

Palladium(II)-Catalyzed Dicarboxymethylation of Chiral Allylic Alcohols: Chirality Transfer Affording Optically Active Diesters Containing Three Contiguous Chiral Centers

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Abstract

Pd-catalyzed olefin dicarbonylation of chiral allylic alcohols with chirality transfer affords the chiral alcohol diesters contiguous chiral centers, in good to excellent diastereoselectivities (78-98%).

HO''	CO (3 atm), F	PdCl ₂ → HO	
	NaOAc, HC(C MeOH, rt, 7)Me) ₃ ′2h	Ė ČO ₂ Me
MeO_2C H_c H_b H_b H_a $J = 15.6 \text{ Hz}$ $J = 8.0 \text{ Hz}$ $NOE = 13.3\%$ $NOE = 10.2\%$			