Development of a Facile Tandem Asymmetric Epoxidation/Ring-opening Protocol: An Efficient Entry to Enantiomerically Enriched Tertiary Naphthtoquinols

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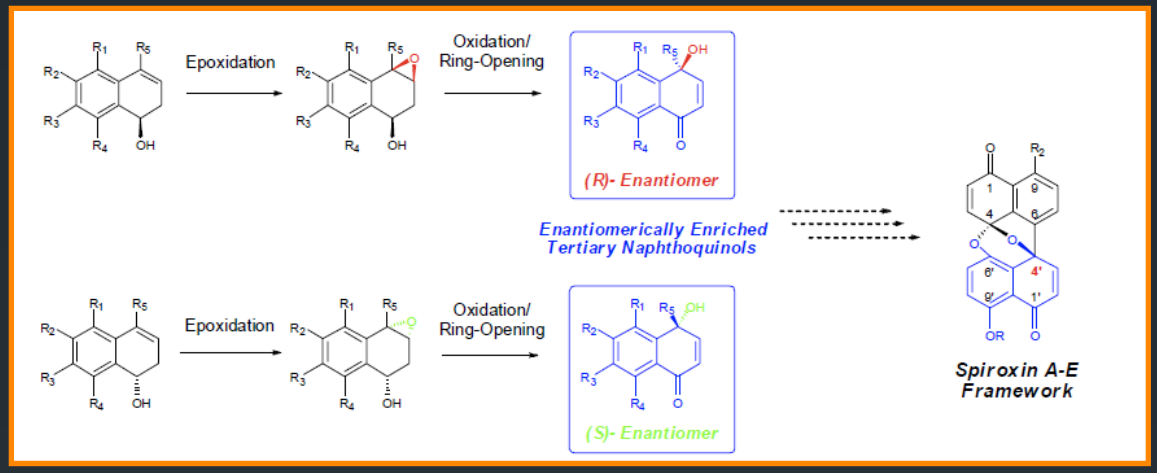
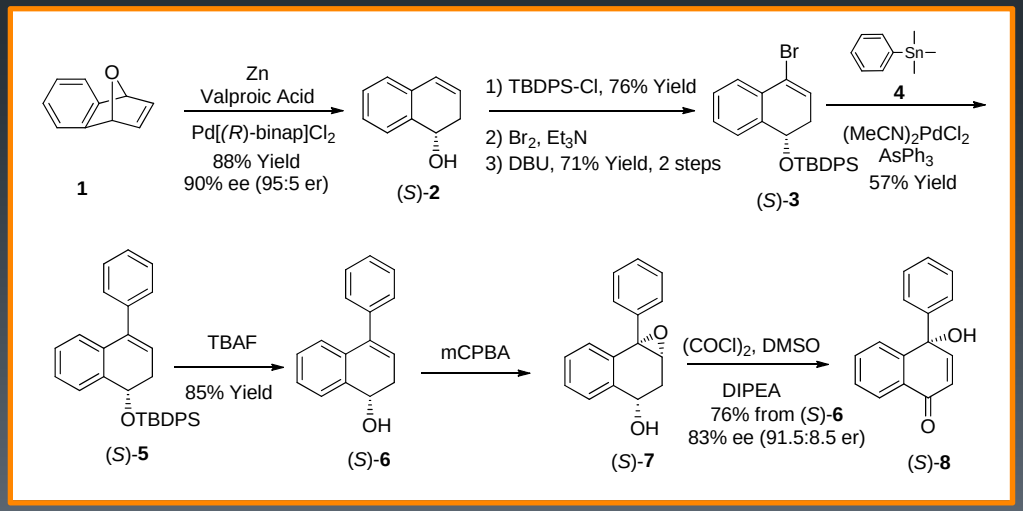


The tertiary naphthoquinol C4' is a key structural component of the architecturally interesting spiroxin family of natural products.



We have developed an efficient catalytic asymmetric approach to the tertiary naphthoquinol stereogenic center present in the spiroxin framework, via tandem oxidation/ring opening of a cyclic 3,4-epoxyalcohol. This new route allows a facile entry into relatively inaccessible tertiary naphthoquinols with high enantioselectivity and without the need of chiral auxiliaries.