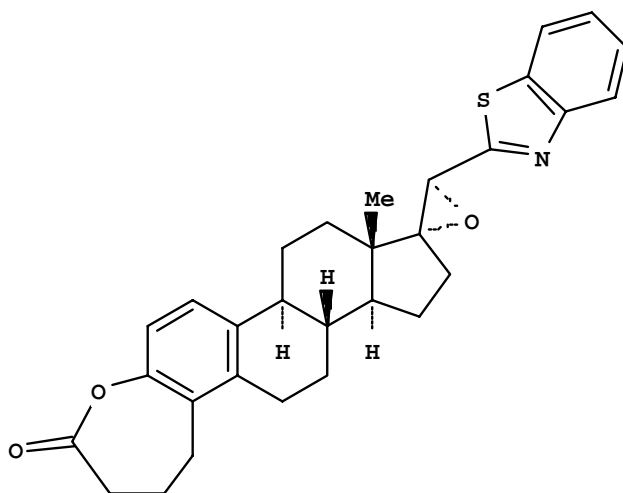


Palladium (II) catalyzed regioselective lactonization of steroids. chemoselective construction of novel estrone derivatives. Troisi, L.; Vasapollo, G.; El Ali, B.; Mele, G.; Florio, S.; Capriati, V. Dipartimento di Biologia, Università di Lecce, Lecce, Italy. Tetrahedron Letters (1999), 40(9), 1771-1774.

Abstract

Palladium acetate and 1,4-bis(diphenylphosphino)butane (dppb) catalyze regioselective cyclocarbonylation of 4-allylsteroids forming exclusively 7-membered ring lactones with excellent yields (96-98 %). The stereoselective addn. of an epoxide ring on the side-chain of steroids is realized by coupling the carbonyl group of the cyclopentanone ring of the steroid with 2-benzothiazolylchloromethyl lithium. The reactions were used in prepn. of the epoxy-lactone estrone deriv I.



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