1996 oxazole derivatives

oxazole derivatives

R 0220 08 - 140 Stereoselective Synthesis of (R)-(-)-2,2-Dimethyl-3-t-butoxycarbonyl-4- ethynyl-oxazolidine: A Chiral Building Block for the Synthesis of a New Class of Substituted Alkynes. — Treatment of the (+)-serine-derived oxazolidine (I) with dibromoethylene triphenylphosphorane affords the 1,1-dibromoalkene (III) which is easily converted to (IV). Electrophilic substitution at the terminal alkyne gives a new series of substituted (VI) or (VIII) which are precursors of potential antibiotic amino acids. — (REGINATO, G.; MORDINI, A.; DEGL'INNOCENTI, A.; CARACCIOLO, M.; Tetrahedron Lett. 36 (1995) 45, 8275-8278; Dip. Chim. Org. "U. Schiff", I-50121 Firenze, Italy; EN)

IV*
$$\frac{\text{1. 2 equiv. BuLi, THF, } -78^{\circ}\text{C, } [30 \text{ min}]}{2, \text{ R-Cl } (V), \text{ THF, } -78^{\circ}\text{C, } [1 \text{ h}]} \xrightarrow{\text{Oxa-C}} \text{Oxa-C} \text{C} - \text{R} \qquad \text{a R: -Tms} \\ \text{b R: -CO-O-Me} \qquad \text{46\%}$$

1