

Pyrrole derivatives

R 0120

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Novel Three-Component Synthesis and Antiproliferative Properties of Diversely Functionalized Pyrrolines. — Several substituted 2-pyrrolines (IV) and (V) are prepared by a novel regio- but not stereoselective three-component reaction. The diastere-oisomeric mixtures can be separated on the basis of their dissimilar solubilities. A number of the compounds shows antiproliferative activity in human cancer cell lines. — (MAGEDOV*, I. V.; LUCHETTI, G.; EVDOKIMOV, N. M.; MANPADI, M.; STEELANT, W. F. A.; VAN SLAMBROUCK, S.; TONGWA, P.; ANTIPIN, M. Y.; KORNIENKO, A.; Bioorg. Med. Chem. Lett. 18 (2008) 4, 1392-1396; Dep. Chem., N. Mex. Inst. Min. Technol., Socorro, NM 87801, USA; Eng.) — H. Haber

HN O CN (II), Ph—CHO (III) , NEt₃

EtOH, reflux

$$I \qquad \qquad IV \qquad V$$

$$O = R: -Me; Ar: -Ph \qquad >90\% (1:1.4)$$

$$O = R: -Tol; Ar: -Ph \qquad >90\% (1:1.6)$$

$$O = R: -Mo_2; Ar: -Ph \qquad >90\% (1:2)$$

$$O = R: -Mo_2; Ar: -Ph \qquad >90\% (1:1.2)$$