Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

Keywords
Authors

chem@tubitak.gov.tr

Scientific Journals Home Page

Synthesis of Some New 1-Acylthiosemicarbazides and 1,2,4-Triazol-5-Thiones, and Their Analgesic and Anti-Inflammatory Activities

Yasemin DÜNDAR[1], Bilge ÇAKIR[1], Esra KÜPELİ[2],
M. Fethi ŞAHİN[1], Ningur NOYANALPAN[1]
[1]Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Gazi University, 06330, Ankara-TURKEY
e-mail: ningur@gazi.edu.tr
[2]Department of Pharmacognosy, Faculty of Pharmacy, Gazi University, 06330, Ankara-TURKEY

Abstract: We synthesized new 1-[3-(2-oxobenzothiazolin-3-yl)propanoyl]-4- substituted-thiosemicarbazides and their corresponding cyclized 3-[2-(2-oxobenzothiazoline-3-yl)ethyl]-4-substituted-1,2,4-triazol-5-thione ana-logs in which position 4 of the triazole ring was substituted by cyclohexyl, methyl, allyl, phenyl, p-methylphenyl, p-methoxyphenyl, p-chlorophenyl, p-nitrophenyl, benzyl, and phenylethyl to screen their analgesic and anti-inflammatory activities as well as gastric ulceration potential in test animals. None of the compounds, except 5a, 5e, and 5h, caused gastric lesions or bleeding. Compound 5g was found to have higher analgesic and anti-inflammatory activity among the synthesized compounds.

Key Words: 2-Benzothiazolinone, thiosemicarbazide, 1,2,4-triazol-5-thione, analgesic and anti-inflammatory activity

Turk. J. Chem., **31**, (2007), 301-313.
Full text: pdf
Other articles published in the same issue: Turk. J. Chem.,vol.31,iss.3.