

عنوان مقاله:

Synthesis and Evaluation of Biological and Antioxidant Activity for Mefenamic Drug Derivatives of Some New Heterocyclic Compounds

محل انتشار:

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خلاصه مقاله:

New heterocyclic derivatives were created in this investigation. The most readily accessible Mefenamic acid (M) was combined with thionyl chloride to produce (M₁ compound). After treating the (M₁) compound with hydrazinecarboxamide to obtain the (M₂) derivative, the compound (M₂) was subjected to a ring closer reaction with NaOH solution to obtain the 1,2,4-triazole-3-ol ring compound (M₃). Compound (M) was reacted with phenyl hydrazine hydrate to produce (M₄), and then a ring closer reaction was performed in basic medium with carbon disulfide and hydrazine hydrate to produce (M₅). The chemical (M₁) was reacted with 3-aminopropanoic acid to produce (M₆). To obtain the oxazin ring, (M₇) molecule was synthesized by treating (M₆) compound with benzaldehyde in the presence of acetic anhydride (M₇ compound). The biological and antioxidant activity of the prepared compounds (M₁-M₇) was studied by (DPPH) method, and the results were good compared to the standard ascorbic acid.

کلمات کلیدی:

Mefenamic acid, Hydrazinecarboxamide, Phenylhydrazine, Oxazin, Antioxidant activity

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