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Synthesis, Characterization, and Biological Evaluation of 2-(N-((2'-(2H-tetrazole-5-yl)-[1,1'-biphenyl]-4yl)-methyl)-pentanamido)-3-methyl butanoic acid derivatives**Anum Masood***Islamia University, Pakistan*

This study aimed to evaluate 2-(N-((2'-(2H-tetrazole-5-yl)-[1,1'-biphenyl]-4yl)-methyl)-pentanamido)-3-methyl butanoic acid -based ester derivatives as a new class of angiotensin-II receptor antagonist. For this purpose, a series of compounds were synthesized using a variety of phenols. Their chemical characterization was established by FTIR, ¹HNMR, and ¹³CNMR techniques. The biological activities including antioxidant potentials using DPPH assay, antihypertensive assay, urease enzyme inhibition assay, and antibacterial assay using agar well diffusion methods were performed. All the new compounds showed significant free radical scavenging potentials more than the parent drug while retaining antihypertensive potentials along with urease inhibition properties. However, the AV2 test compound was found most potent against hypertension. Most of the synthesized analogs showed urease inhibitory actions. Molecular docking studies were performed for all the active analogs to decode the binding detail of the ligands with receptors of the enzyme's active site.

Biography

Anum has completed his PhD at the age of 31 years from Islamia University. She was former lecturer at Islamia University. She has published her paper in reputed journals. She also performed hospital duties as a hospital pharmacist in a private well reputed organization.