Synthesis and evaluation of novel diphenylthiazole derivatives as potential anti-inflammatory agents

Abstract

In the presented study, we synthesized a novel series of 18 diphenylthiazole derivatives and tested their anti-inflammatory properties. They showed significant anti-inflammatory properties in inflamed mice paws animal model. Docking-based analysis suggested that they act as COX enzyme inhibitors. The most potent compound 9e is significantly more active in reducing inflamed animal paws compared to diclofenac. Accordingly, we believe these compounds are good leads for further development into potent anti-inflammatory drugs.