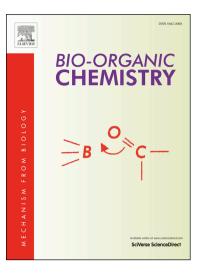
Accepted Manuscript

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ACCEPTED MANUSCRIPT

Biological evaluation of New imidazole derivatives tethered with indole moiety as Potent α-Glucosidase Inhibitors

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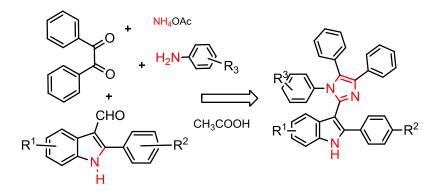
Keywords Diabetes; a-Glucosidase inhibition; Multicomponent reactions; 2-Arylindoles; NMR spectra

Abstract

A series of triarylimidazoles substituted with 2-arylindoles (**4a-4j**) were prepared and evaluated for their *in vitro* α -Glucosidase inhibition. α -Glucosidase inhibition assay displayed a new class of highly potent agents The new compounds showed significant α -glucosidase inhibitory activity as compared to the standard inhibitor acrabose. Structures of synthesized compounds were determined by using Mass spectrometry FT-IR,¹H NMR and ¹³C NMR.

Graphical Abstract:

α-Glucosidase inhibition by triarylimidazoles substituted with 2-arylindoles



 $R^1 = H, Cl, F$

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