

Short research article

## NOVEL HALOGENS SUBSTITUTED COUMARIN-ALDEHYDE AS AN ANTI-COAGULANTS

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### Abstract

Coumarins have a long history of having number of pharmacological activities such as anticoagulant, antithrombotic, antimutagenic, vasodilator, LOX and CLOX inhibitors. The recent success of coumarins as anticoagulant has further highlighted the importance of this class in medicinal chemistry. Systematic investigation of this class of compound revealed that coumarin derivatives containing pharmacophore agent plays an important role in medicinal chemistry. The compounds were found to have significant anticoagulant activity. The observed Schiff bases of 4-chloro-(3-substituted-phenylimino)-methyl-coumarin as anticoagulant activities are attributed to the substitution of 2-chloro, 2,6-dichloro, 2-fluoro and 4-fluoro group at phenylimino ring of synthesized compounds. These substitutions showed more significant activities than 4-hydroxy coumarin. The comparative evaluation of active compounds will require further studies for detailed preclinical & clinical evaluation.

**Keywords:** Anti-coagulant, coumarin, clotting time, vasodilators, LOX inhibitors

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