**Synthesis and investigation of Anti‐inflammatory and anticonvulsant activities of novel coumarin-diacylated hydrazide derivatives**

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**I. Instrumentation Details**

Unless noted otherwise, all of compounds were used as provided without further purification. All of compounds were obtained from Merck and Sigma-Aldrich.

1H and 13C NMR spectra were recorded in CDCI3 or DMSO4-d6 [using the solvent peak as internal reference ( DMSO4-d6 : δ H 2.50; δ C 39.51 and CDCl3 at 7.27 ppm for 1H and 77.0 ppm for 13C) on a Bruker Avance III 400 MHz spectrometer operating at 400 MHz and 100 MHz, respectively. All chemical shift values are quoted in ppm and coupling constants quoted in Hz. Multiplicities are indicated, s (singlet), d (doublet), t (triplet), q (quartet), sept (septet), m (multiplet), br s (broad singlet). Follow up of the reactions and checking the purity of the compounds were made by TLC on silica gel-precoated aluminium sheets (Type 60, F254, Merck, Darmstadt, Germany) using hexane/ethyl acetate 80–20 (4:1, v/v) and the spots were detected by exposure to UV lamp at λ254 nanometer for few seconds.

The chemical names given for the prepared compounds are according to the IUPAC system.

IR spectra were recorded on a Perkin-Elmer 55148 spectrometer.

Melting points were determined using an Electrothermal 9100 instrument.

Elemental analyses were measured on a Thermo Flash 2000 Organic Elemental Analyzer.















































































