

Supplementary material

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Development of water-soluble nanoformulations of novel pyrazolone derivatives and the evaluation of their antibacterial and antioxidant activities

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Results for HPLC Method validation

Table SM1: Summary of optimum system conditions for analysis

Parameter	Observed
Mobile Phase	ACN: Water (0.1% TFA)
Flow Rate	1 mL/min for Compound I and 0.5 mL/min for compound II
Column type	Shim-pack GIST C18 5 μ m, 4.61.D \times 150 mm
Injection volume	20 μ L
Column Temperature	25 $^{\circ}$ C
Retention Time	< 10 min

a. Linearity

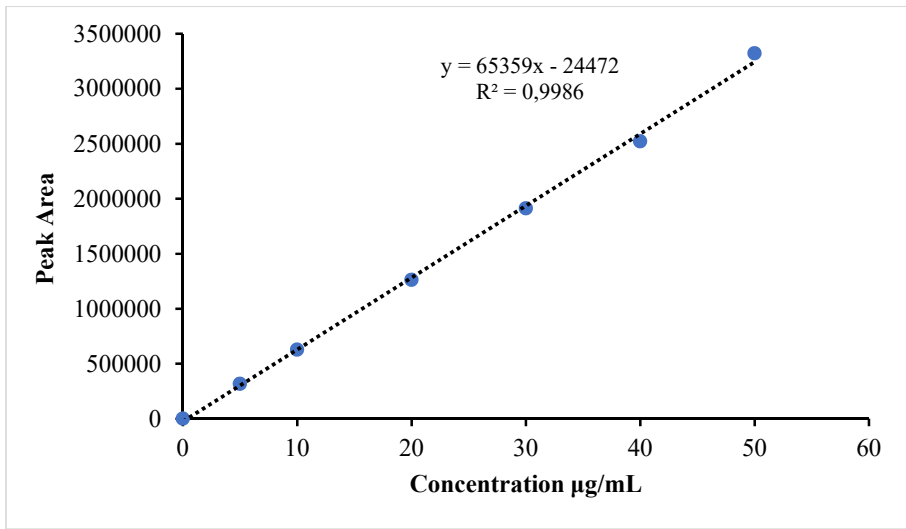


Fig. SM1 Compound I calibration curve

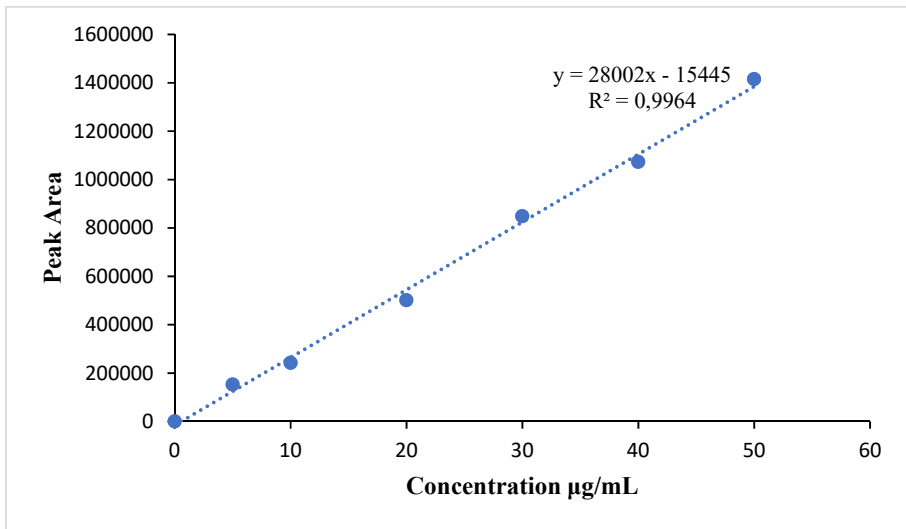


Fig. SM2 Compound II calibration curve

b. Specificity and Suitability

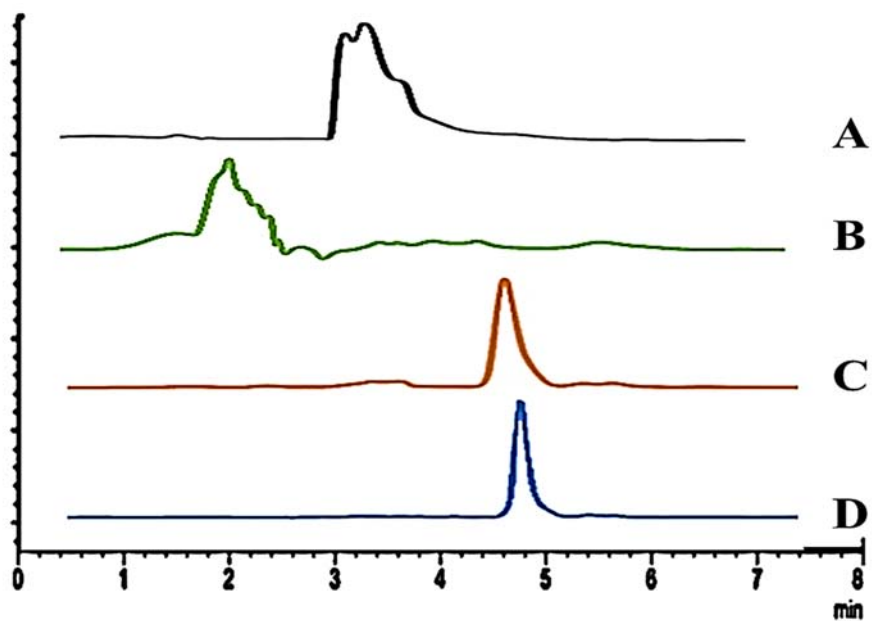


Fig. SM3 Chromatograms of the Blank formulation [A], Methanol: solvent for dilution [B], the compound-loaded Nanosuspension [C], and Bare compound [D], which further established the specificity of the method and its suitable application in detecting the compound in nanosuspensions