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Graphical Abstract

Design, synthesis and antimicrobial evaluation of novel benzimidazole-incorporated sulfonamide analogues

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A novel series of benzimidazole-incorporated sulfonamide analogues were developed and screened for their antimicrobial activities. Interaction with calf thymus DNA and molecular docking were investigated. Transportation behavior with HSA was explored and molecular electrostatic potentiality was studied by full geometry optimizations.

NHCOCH₃ 0=S=0 5c, R = 4-F 5g, R = 2,4-2Cl 5 g-DNA hexamer duplex 5c-DNA hexamer duplex

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