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Spectroscopic characterization, antimicrobial activity and Molecular Docking Study of novel azo-imine functionalized sulphamethoxazoles

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Sulfamethoxazolyl-azo-imine derivatives (1, 2a-f) have been examined against gram positive bacteria, *B. subtillis* and gram negative *E. coli* and have found effective selectively on *B. subtillis*. Some of them also show antiviral activity against HSV-1Finfection. The structures of the compounds are supported by different spectroscopic data and single crystal X-ray structure of 2c. The compounds have been docked in the DHPS protein cavity to examine their binding strength and 2c shows highest binding strength.



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