

Antibacterial and Cytotoxic Natural and Synthesized Hydroquinones from Sponge *Ircinia spinosula*

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In order to check the structure-activity relationship and find more potent derivatives of the natural products **1** and **2** obtained from sponge *Ircinia spinosula*, a series of oxidation, hydrogenation, acetylation and methylation derivatives was prepared. All compounds (natural and synthetic ones) were screened for their cytotoxic and antibacterial activities. The biological studies showed a wide range of antibacterial activity even though only **2** and **2d** showed a moderate cytotoxicity against the clone C98. The oxidation of the hydroquinone to quinone and the hydrogenation of the side-chain increased the antibacterial effect of the molecules.

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