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Cytotoxic and antibacterial activities of marine sponge-derived fungus *aspergillus nomius* NC06 (Article) [\(Open Access\)](#)

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Abstract

Sponge-derived fungi have attracted recent attention due to its important source of interesting biologically active compounds. In our previous study, we have obtained 13 fungi from marine sponge *Neopetrsiachaliniformis*. Among them, only *Aspergillus nomius* NC06 showed cytotoxic activity with the percentage of viability 113.9 % and 70.31 % of Vero cell and WiDr colon cancer cell, respectively. This study aimed to isolate the cytotoxic compound from the ethyl acetate extract of *N. nomius* NC06 using chromatography method. A total of 5 fractions of the extract obtained using vacuum liquid chromatography. These fractions were tested against HCT 116 colon cancer cell and ten human pathogenic bacteria. Fraction II, III, IV, and V showed cytotoxic activity with IC_{50} of 5.28, 15.82, 10.27, and 45.57 $\mu\text{g/mL}$, respectively. In antibacterial testing, fraction II and III were potential because of their ability to inhibit the growth of ten pathogenic bacteria with the diameter of inhibition zone more than 12 mm. © RASĀYAN. All rights reserved.

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
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