

Lentin, a novel and potent antifungal protein from shitake mushroom with inhibitory effects on activity of human immunodeficiency virus-1 reverse transcriptase and proliferation of leukemia cells.

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From the fruiting bodies of the edible mushroom *Lentinus edodes*, a novel protein designated lentin with potent antifungal activity was isolated. Lentin was unadsorbed on DEAE-cellulose, and adsorbed on Affi-gel blue gel and Mono S. The N-terminal sequence of lentin manifested similarity to endoglucanase. Lentin, which had a molecular mass of 27.5 kDa, inhibited mycelial growth in a variety of fungal species including *Physalospora piricola*, *Botrytis cinerea* and *Mycosphaerella arachidicola*. Lentin also exerted an inhibitory activity on HIV-1 reverse transcriptase and proliferation of leukemia cells.

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