Bioprospect of Lovastatin in Aspergillus spp. from University of Indonesia Culture Collection (UICC)

Marvella Nethania, author

Deskripsi Lengkap: https://lib.ui.ac.id/detail?id=20280618&lokasi=lokal

Abstrak

The aim of this research is to select and analyse lovastatin from isolated molds of Aspergillus spp. from University of Indonesia Culture Collection (UICC). Lovastatin is an inhibitor 3 hydroxy-3-methylglutaryl-coenzyme-A reductase (HMG-CoA reductase) enzyme and a competitive inhibitor of the biosynthesis of cholestrol. The result revealed that out of 40 cultures, 18 cultures (45%) produced lovastatin and 22 cultures (55%) were negative. Aspergillus flavus UICC 360 showed the biggest lovastatin production compared to a number of selected cultures. Thin Layer Chromatography (TLC) analysis showed an amount of Aspergillus with same similarities of Rf value compared to the standard High Performance Chromatography (HPLC) analysis which confirmed that lovastatin Aspergillus flavus UICC 360 has the same retention time with the standard (13.2) minutes.