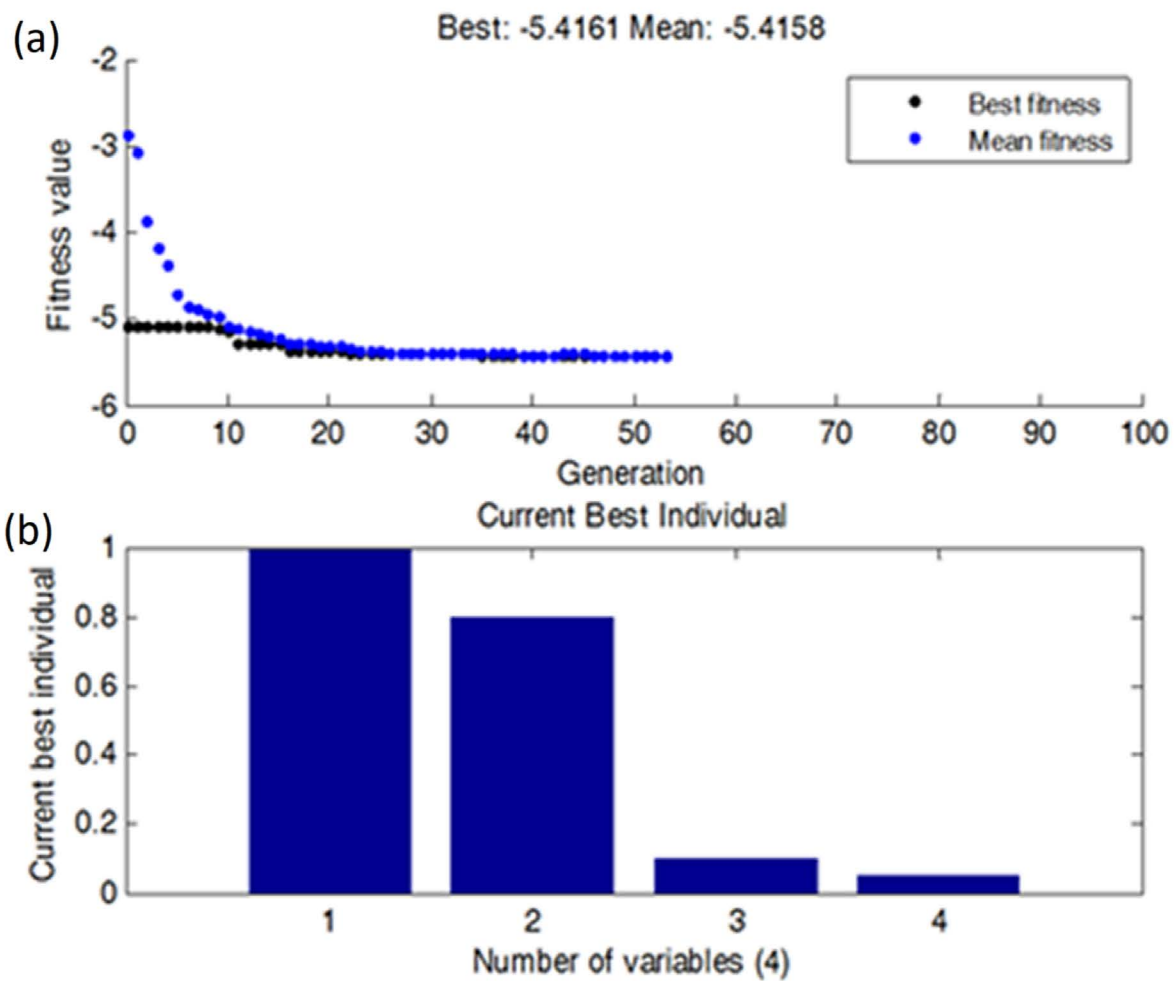


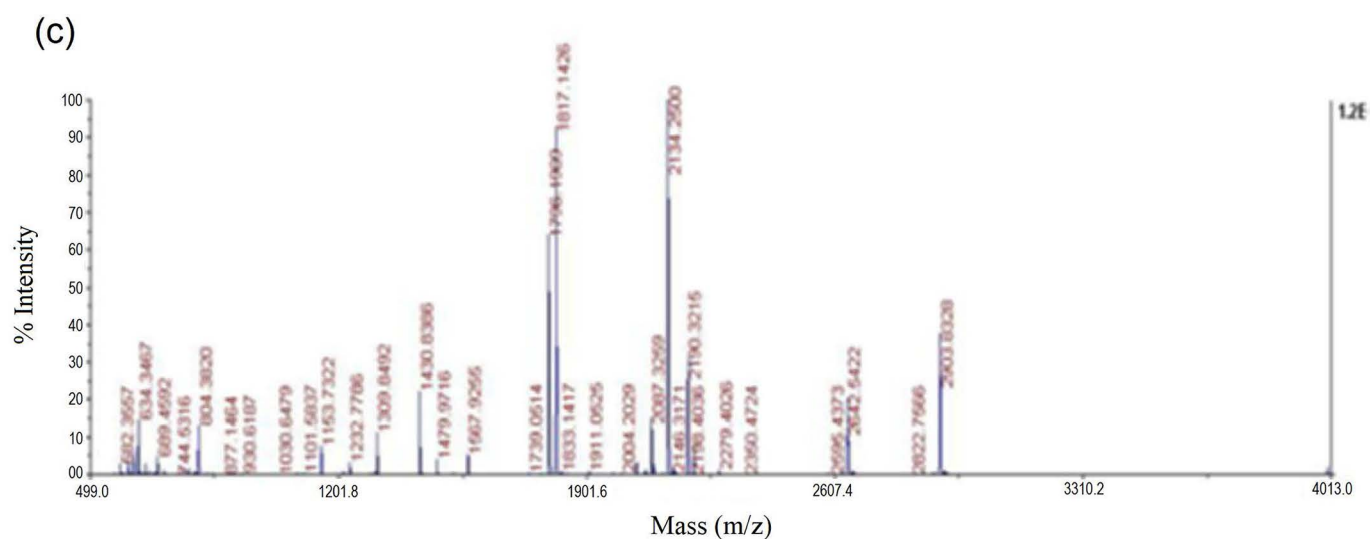
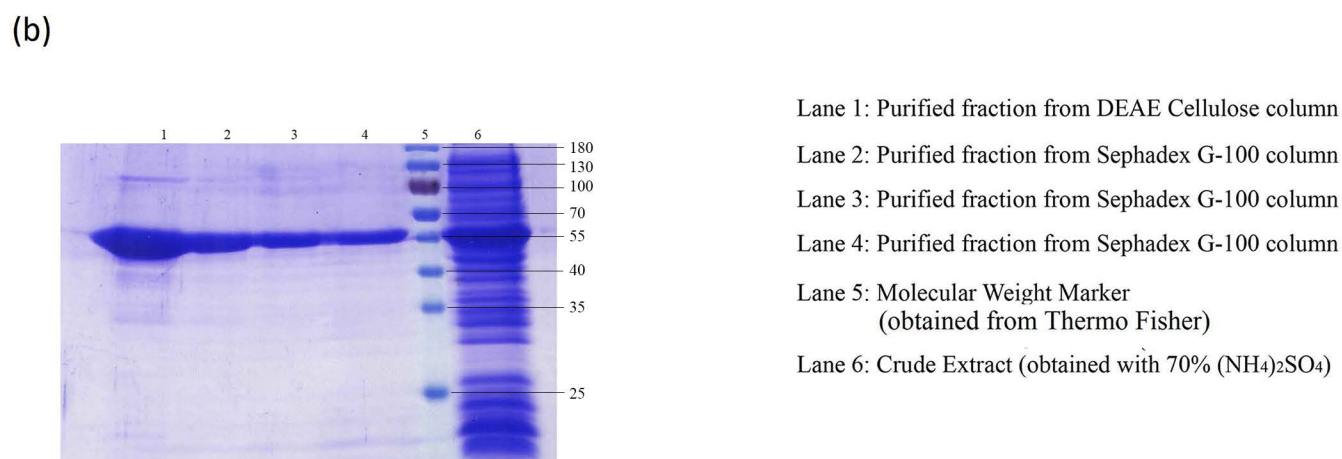
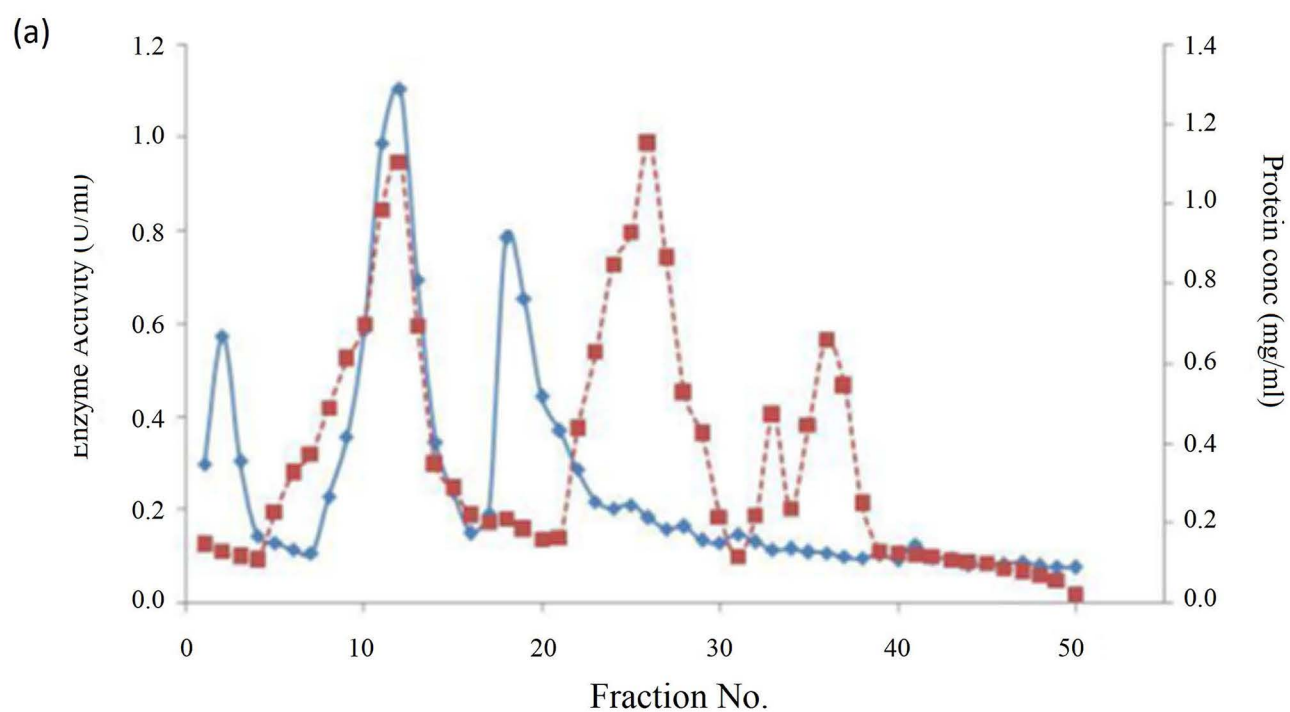
SUPPLEMENTARY INFORMATION

Response Surface Methodology-Genetic Algorithm Based Medium Optimization, Purification, and Characterization of Cholesterol Oxidase from *Streptomyces rimosus*

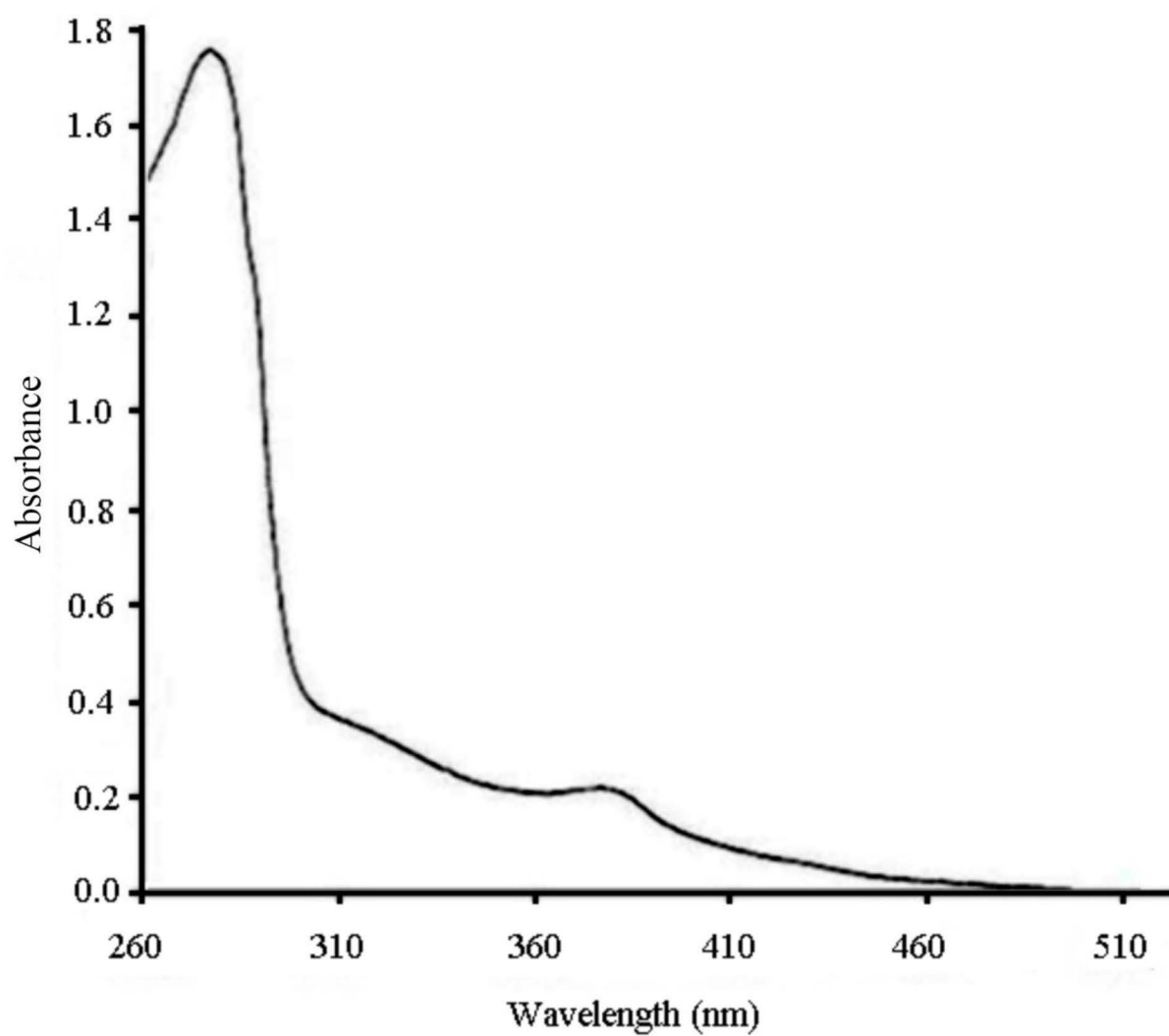
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Supplementary Figure S1. Genetic algorithm showing generations till the optimum results obtained, the optimum concentration of the medium components:
(a) Current generation vs. fitness value.
(b) Current best individual vs. number of variables.



Supplementary Figure S2. (a). Elution profile of COD using DEAE-cellulose column chromatography
 (b). SDS-PAGE of purified fractions and crude extract.
 (c). Mass Spectroscopy (MALDI-TOF) of purified cholesterol oxidase.



Supplementary Figure S3. UV-VIS absorption spectra with absorption maxima at 280 nm and 380 nm