ABSTRACT

Recombinant β-glucosidase enzyme was expressed and purified in *E.coli* BL21 codon plus. A prominent band of recombinant enzyme was observed on SDS-PAGE with a molecular weight of 62.0 KDa. The enzyme was purified by techniques involving heat treatment, ammonium sulfate fractionation and UNOsphere Ion exchange chromatography. For further purification Anion exchange chromatography was done to obtain the purified enzyme. Para-Nitrophenyl β-D-glucopyranoside was used as a substrate to determine the enzyme activity. The optimal activity of recombinant β-glucosidase was at 90 °C at pH 5.0. The specific activity of purified enzyme after chromatography was 242400 U/mg with purification fold of 1.49.