**Response to Reviewer B suggestions**

I thank the reviewer for his/her valuable suggestions.

1-Still, not enough details were given for the determination
of enzyme activity.

Answer-We have inserted information on determination of enzyme activity

“A blank containing 1ml of buffer plus substrate was used to correct the thermal hydrolysis of ONPG. Enzyme activity was expressed as *o*-nitrophenol (*o-*NP) units li­berated, where one unit (U) is defined as the amount of enzyme that released 1 μmol of *o-*NP from ortho-Nitrophenyl-β-D-galactopyranoside (*o-*NPG) per mi­n under the assay conditions at 35°C. Absorbances at 420 nm were converted to *o*-nitrophenol concentration using a millimolar extinction coefficient (εmM420) of 4.376 mM−1cm−1 for *o-*NPG.”

2-No full name is given for the o-NPG substrate in the entire paper

Answer--full name of o-NPG is given in material and methods where first appears in the manuscript as ortho-Nitrophenyl-β-D-galactopyranoside (*o-*NPG).

3-Lactose hydrolysis alone is an indication of active enzyme not of its potential use
in biotechnology.

Answer-We agree the lactose hydrolysis is not indication, but it gives an idea of enzyme potential. In this short period of revising, We could not produce enough enzyme at large scale to test lactose hydrolysis within milk, eventhough we tried to test in skimmed milk but unfortunately not producible data obtained with limited pure enzyme concentration, so we would stick to lactose hydrolysis alone for enzyme potential. We have written in conclusion accordingly needing further study for biotechnological application as “The β-galactosidase from *Enterobacter* sp. 3TP2Amay have an application potential and need a further study for utilizing in biotechnology”

4- For the determination of molecular mass, I would suggest the gel filtration experiment and not electrophoresis.

Answer-We have tried to carry out using gel filtration technique to estimate MW of our enzyme using Standard proteins with known MWs and it seems that we have got similar results with electrophoresis so we have inserted the information accordingly under the subtitle of “*Molecular Weight Estimation by Electrophoresis and Gel Filtration Chromatogram”* inexperimental, results and other sections such as abstract accordingly as*;*

At Experimental section

“We have also carried out gel filtration technique to estimate MW of our enzyme using standard proteins with known MWs: [carbonic anhydrase (MW: 29 kDa, Sigma C5024), α-amylase (MW: 55 kDa, Sigma A6380) and β-galactosidase (MW: 116 kDa, Sigma G-6008)] The enzyme purification method was carried out exactly the same as above using a Sephadex G-75 column (1,5 cm × 30 cm). The dialysed enzyme solution (1.5 mL) was applied to the column and the enzyme fractions were eluted with the same buffer at a flow rate of 3 mL/ min collected for the enzyme activity (A420 nm) and protein content (A280 nm) determination. The Kav values for proteins of known molecular weights were calculated and the Kav values were plotted against the logarithmic values of the corresponding molecular weights to get a calibration curve used to estimate the molecular mass of the studied *β-*galactosidase. “

At Results section

*“Molecular Weight Estimation by Electrophoresis and Gel Filtration Technique*

Analysis and characterization of the purified β-galactosidase from *Enterobacter* sp. 3TP2A were carried out by SDS-PAGE and Native- PAGE, as well as estimated by gel filtration chromatography using Sephadex G-75 column (Supplementary 2).”

Analysis and characterization of the purified β-galactosidase from *Enterobacter* sp. 3TP2A were carried out by SDS-PAGE and Native- PAGE, as well as estimated by gel filtration chromatography using Sephadex G-75 column (Supplementary 2). The molecular weight analysis of the β-galactosidase showed a single band of protein, and its molecular mass was estimated as approximately 60 kDa (Figure 3a). Native gradient PAGE (Figure 3b) and estimation by gel filtration chromatography also showed aproximate molecular weight of 60 kDa (Supplementary 2).