

PARTIAL CHROMATOGRAPHY OF BETA GALACTOSIDASE BY GEL FILTRATION FROM HUMAN PLACENTA

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(Accepted 28 October 2011)

ABSTRACT – Beta-galactosidases (beta-D-galactoside-galactohydrolases, lactases) (EC:3.2.1.23) are enzymes found in most living beings such as plants, bacteria, fungi and animals as well as human placenta. Beta-galactosidase is important industrial enzyme used for the hydrolysis of lactose from milk. In this study, we partially purified three isoenzymes of beta-galactosidases from human placenta. The partial purified human placental enzyme exhibited high activity at 25°C. The beta galactosidase activities showed 8 µ/ml , 7µ/ml and 6µ/ml and specific activities obtained 8.05 µ/mg, 83.66 µ/mg and 24.27 µ/mg respectively. These results suggest that these fractions are three enzymes with difference structure.

Key Words: Beta-galactosidase, human placenta, chromatography.