

Beta-galactosidase is an enzyme that breaks down lactose into two monosaccharides. Students will learn to measure the activity of the enzyme by measuring the rate at which products appear and the time required for this enzyme to be synthesized.

Concepts: understanding the lac operon and its function; using an assay to indirectly calculate enzymatic activity.

Skills: proper use of micropipettors; correct handling and disposal of bacterial cells; use of the spectrophotometer, including using the correct blank.