

β-Glucosidase

G755204

Storage temperature: 2-8°C.

Introduction:

Catalyzes the hydrolysis of glucosides. Emulsin originally was the term applied to the extract of sweet almonds. It remains as the historical prototype of β-glucosidase. Many other sources of the enzyme have been described. Emulsin also shows significant D-galactosidase activity and there is some question as to whether or not it is one enzyme with two activities, because non-parallel response to inhibitors points to two separate enzymes. D-mannosidase has also been reported in almond emulsin.

Form: Supplied as a light yellow to yellow tan powder.

Solubility: Colorless to light yellow, clear to slightly hazy in water.

Solubility Concentration: 1.90-2.10mg/ml

Assay Method:

Salicin is hydrolyzed by β-glucosidase to yield saligenin and β-D-glucose. The rate of formation of glucose is measured in a hexokinase/glucose-6-phosphate dehydrogenase system. One unit releases one micromole of glucose per minute at 37°C and pH 5.0 under the specified conditions.

Specificity: β-glucosides and β-galactosides are reportedly substrates for the enzyme.

Inhibitors: HgCl₂, other heavy metal ions, sulfhydryl-binding compounds and polyols.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Toxicity and Hazards: All products should be handled by qualified personnel only, trained in laboratory procedures.