

β -Galactosidase from Escherichia coli

Product Code: 172627

EC no: 3.2.1.23

SKU: 172627

Category: [Enzymes](#)

PRODUCT DESCRIPTION

SPECIFICATIONS:

EC 3.2.1.23

Product name: β -D-galactoside galactohydrolase

Appearance: white amorphous powder lyophilized

Activity: Grade II, 500 U/mg-solid or more

Contaminants:

- α -galactosidase $\leq 1 \times 10^{-4}$ %, α -glucosidase $\leq 1 \times 10^{-4}$ %
- β -glucosidase $\leq 2 \times 10^{-3}$ %, β -mannosidase $\leq 1 \times 10^{-4}$ %
- α -mannosidase $\leq 1 \times 10^{-4}$ % proteinase ≤ 10 mAbs/mg-P

Stabilizer: Mg²⁺

Stability: Stable at - 20 °C for at least 12 months

Molecular weight: 540,000

Isoelectric point: 4.61

Michaelis constants: $3.0 \times 10^{-4} \text{M}$ (o-Nitrophenyl- β -D-galactoside), $6.7 \times 10^{-5} \text{M}$ (p-Nitrophenyl- β -D-galactoside), $2.3 \times 10^{-4} \text{M}$ (Phenyl- β -D-galactoside), $2.5 \times 10^{-3} \text{M}$ (Lactose)

Inhibitors: p-Chloromercuribenzoate Iodoacetamide heavy metal ions (Zn^{2+} Fe^{3+} Cd^{2+} Cu^{2+} Pb^{2+} Ag^{+} Hg^{2+}), Ionic detergents (SDS, DAC, etc.)

Optimum pH: 7.0 - 7.5

Optimum temperature: 50 - 55°C

pH Stability: pH 6.5–8.5 (25°C, 20hr)

Thermal stability: Below 50 °C (pH 7.3, 15min)

Substrate specificity: The enzyme specifically hydrolyzes β -D-galactosyl linkage