

Recombinant E.coli Beta-galactosidase Protein

Catalog Number: PKSQ050060

Note: Centrifuge before opening to ensure complete recovery of vial contents.

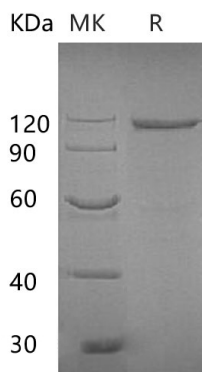
Description

Species	E.coli
Mol_Mass	112.9 kDa
Accession	P00722
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 µm filtered solution of PBS, pH7.4.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

β -galactosidase is an exoglycosidase which hydrolyzes the β -glycosidic bond formed between a galactose and its organic moiety. It may also cleave fucosides and arabinosides but with much lower efficiency. β -galactosides include carbohydrates containing galactose where the glycosidic bond lies above the galactose molecule. Substrates of different β -galactosidases include ganglioside GM1, lactosylceramides, lactose, and various glycoproteins. It is an essential enzyme in the human body. Deficiencies in the protein can result in galactosialidosis or Morquio B syndrome. In E. coli, the gene of β -galactosidase, the lacZ gene, is present as part of the inducible system lac operon which is activated in the presence of lactose when glucose level is low. β -galactosidase is important for organisms as it is a key provider in the production of energy and a source of carbons through the break down of lactose to galactose and glucose.

For Research Use Only