Recombinant Human Biotinidase/BTD Protein (His Tag)

Catalog Number: PKSH030529

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

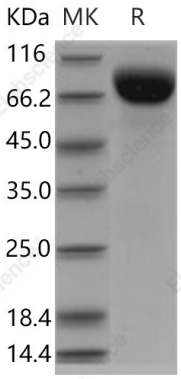
Description

Species	Human
Source	HEK293 Cells-derived Human Biotinidase/BTD protein Met 1-Asp543, with an C-terminal His
Calculated MW	58.2 kDa
Observed MW	66-76 kDa
Accession	P43251
Bio-activity	Measured by its ability to hydrolyze biocytin to lysine and biotin. The specific activity is > 500pmol/min/μg.

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	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Biotinidase, also known as biotinase and BTD, is a ubiquitous mammalian cell enzyme which expressed at high levels in the liver, serum, and kidney. Its primary function is to cleave biotin from biocytin, preserving the pool of biotin for use as a cofactor for biotin dependent enzymes, namely the 4 human carboxylases. Biotinidase also recycles biotin from enzymes in the body that use it as a helper component in order to function. These enzymes, known ascarboxylases, are important in the processing offats, carbohydrates, andproteins. Biotin is attached to these carboxylase enzymes through anamino acid (the building material of proteins) calledlysine, forming a complex calledbiocytin.