

## Biotinidase / Biotinase / BTD Recombinant Protein | BTD recombinant protein

Recombinant Human Biotinidase / Biotinase / BTD Protein (His tag)

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| CATALOG #<br><b>AAA173522</b> | HOST<br><b>HEK293 Cells</b> |
|-------------------------------|-----------------------------|

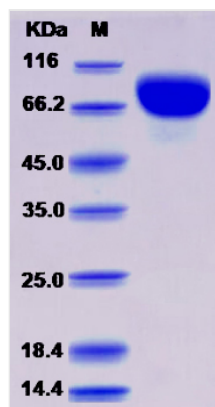
### PRODUCT SYNONYMS

Biotinidase / Biotinase / BTD; Recombinant Human Biotinidase / Biotinase / BTD Protein (His tag); BTD; BTD recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                     |
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| Host                    | HEK293 Cells                                                                                                                                                                                                                                                        |
| Purity/Purification     | > 95 % as determined by reducing SDS-PAGE                                                                                                                                                                                                                           |
| Form/Format             | Lyophilized from sterile PBS, pH 7.4, 5% Trehalose, 5% Mannitol, 0.01% Tween-80                                                                                                                                                                                     |
| Sequence Length         | 543                                                                                                                                                                                                                                                                 |
| Species                 | Human                                                                                                                                                                                                                                                               |
| Sequence                | Met1 - Asp543                                                                                                                                                                                                                                                       |
| Tag                     | C-His                                                                                                                                                                                                                                                               |
| Bio-Activity            | Measured by its ability to hydrolyze biocytin to lysine and biotin. The specific activity is >500pmol/min/ug.                                                                                                                                                       |
| Endotoxin               | < 1.0 EU per mug of the protein as determined by the LAL method                                                                                                                                                                                                     |
| Reconstitution          | We recommend centrifuging the vial before opening to bring the contents to the bottom. Do not mix by vortex. It is recommended that sterile water be added to the vial to prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis               |
| Preparation and Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 degrees to -80 degrees. Reconstituted protein solution can be stored at 4-8 degrees C for 2-7 days. Aliquots of reconstituted samples are stable at < -20 degrees C for 3 months. |

### IMAGES



SDS-PAGE

&gt; 95% as determined by reducing SDS-PAGE

ADDITIONAL INFORMATION

|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| Related Product Information for BTD recombinant protein | <p>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 as carboxylases, are important in the processing of fats, carbohydrates, and proteins. Biotin is attached to these carboxylase enzymes through an amino acid (the building material of proteins) called lysine, forming a complex called biocytin.</p> <p>Description: A DNA sequence encoding the human BTD (P43251) (Met1-Asp543) with a C-terminal polyhistidine tag was expressed.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                |
|----------------------------------|----------------------------------------------------------------|
| NCBI GI #                        | 4557373                                                        |
| NCBI GeneID                      | 686                                                            |
| NCBI Accession #                 | NP_000051.1                                                    |
| NCBI GenBank Nucleotide #        | NM_000060.4                                                    |
| UniProt Accession #              | P43251; Q96EM9; A6NHF2; B2R865; B4DFX1; B4DLJ9; B7Z7C9; F8W1Q3 |
| Molecular Weight                 | Calculated MW: 58.2 kDa<br>Observed MW: 66-76 kDa              |
| NCBI Official Full Name          | biotinidase isoform 3                                          |
| NCBI Official Synonym Full Names | biotinidase                                                    |
| NCBI Official Symbol             | BTD                                                            |
| NCBI Protein Information         | biotinidase                                                    |
| UniProt Protein Name             | Biotinidase                                                    |
| UniProt Gene Name                | BTD                                                            |
| UniProt Synonym Gene Names       | Biotinase                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/btd-recombinant-protein-hek293-cells/173522>