

Beta-galactosidase/GLB1 Protein, E.coli

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| Cat. No.: | HY-P7859 |
| Synonyms: | rEcoBeta-galactosidase; Beta-galactosidase; Beta-gal; Lactase; lacZ |
| Species: | E.coli |
| Source: | E. coli |
| Accession: | P00722 (M1-K1024) |
| Gene ID: | 945006 |
| Molecular Weight: | Approximately 115.0 kDa |

PROPERTIES

AA Sequence

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MTM I T D S L A V   V L Q R R D W E N P   G V T Q L N R L A A   H P P F A S W R N S
E E A R T D R P S Q   Q L R S L N G E W R   F A W F P A P E A V   P E S W L E C D L P
E A D T V V V P S N   W Q M H G Y D A P I   Y T N V T Y P I T V   N P P F V P T E N P
T G C Y S L T F N V   D E S W L Q E G Q T   R I I F D G V N S A   F H L W C N G R W V
G Y G Q D S R L P S   E F D L S A F L R A   G E N R L A V M V L   R W S D G S Y L E D
Q D M W R M S G I F   R D V S L L H K P T   T Q I S D F H V A T   R F N D D F S R A V
L E A E V Q M C G E   L R D Y L R V T V S   L W Q G E T Q V A S   G T A P F G G E I I
D E R G G Y A D R V   T L R L N V E N P K   L W S A E I P N L Y   R A V V E L H T A D
G T L I E A E A C D   V G F R E V R I E N   G L L L L N G K P L   L I R G V N R H E H
H P L H G Q V M D E   Q T M V Q D I L L M   K Q N N F N A V R C   S H Y P N H P L W Y
T L C D R Y G L Y V   V D E A N I E T H G   M V P M N R L T D D   P R W L P A M S E R
V T R M V Q R D R N   H P S V I I W S L G   N E S G H G A N H D   A L Y R W I K S V D
P S R P V Q Y E G G   G A D T T A T D I I   C P M Y A R V D E D   Q P F P A V P K W S
I K K W L S L P G E   T R P L I L C E Y A   H A M G N S L G G F   A K Y W Q A F R Q Y
P R L Q G G F V W D   W V D Q S L I K Y D   E N G N P W S A Y G   G D F G D T P N D R
Q F C M N G L V F A   D R T P H P A L T E   A K H Q Q Q F F Q F   R L S G Q T I E V T
S E Y L F R H S D N   E L L H W M V A L D   G K P L A S G E V P   L D V A P Q G K Q L
I E L P E L P Q P E   S A G Q L W L T V R   V V Q P N A T A W S   E A G H I S A W Q Q
W R L A E N L S V T   L P A A S H A I P H   L T T S E M D F C I   E L G N K R W Q F N
R Q S G F L S Q M W   I G D K K Q L L T P   L R D Q F T R A P L   D N D I G V S E A T
R I D P N A W V E R   W K A A G H Y Q A E   A A L L Q C T A D T   L A D A V L I T T A
H A W Q H Q G K T L   F I S R K T Y R I D   G S G Q M A I T V D   V E V A S D T P H P
A R I G L N C Q L A   Q V A E R V N W L G   L G P Q E N Y P D R   L T A A C F D R W D
L P L S D M Y T P Y   V F P S E N G L R C   G T R E L N Y G P H   Q W R G D F Q F N I
S R Y S Q Q Q L M E   T S H R H L L H A E   E G T W L N I D G F   H M G I G G D D S W
S P S V S A E F Q L   S A G R Y H Y Q L V   W C Q K

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Biological Activity

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance

Solution.

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| Formulation | Supplied as a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, pH 8.0. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconstitution | N/A |
| Storage & Stability | Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles. |
| Shipping | Shipping with dry ice. |

DESCRIPTION

Background

Beta-galactosidase is a hydrolase produced by *Escherichia coli*, which is widely found in natural plants. Beta-galactosidase is a tetramer of four identical, abnormally long polypeptide chains, consisting of 9-10 subunits, with amino acid composition very different from that of Colithinase. Beta-galactosidase can be combined with Mg^{2+} , Mn^{2+} and Na^+ . Beta-galactosidase is inhibited by phenethylthiobeta-d-galactose (PETG), isopropyl thiobeta-d-galactose (IPTG), L-ribose, d-galactolactone, lactose, and 2-amino-d-galactose. Beta-galactosidase has a large molecular weight and is easy to be isolated and purified. Beta-galactosidase can be used in food research^{[1][2][3][4][5]}.

Caution: Product has not been fully validated for medical applications. For research use only.

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