



Recombinant strain K12 lacZ

Protein Product Manual

1. Product Basic Information

Product No.: REP07318

Protein Name: Beta-Galactosidase, LacZ Type (lacZ)

Aliases: beta-galactosidase, LacZ type

UniProt ID: P0C1Y0

UniProt Link: <https://www.uniprot.org/uniprotkb/P0C1Y0/entry>

Species Source: Escherichia coli (strain K12)

Expression System: E.coli

Protein Length: Full Length of Mature Protein (2-1024aa)

Molecular Weight: 164.1 kDa

Protein Tag: N-terminal MBP-tagged and C-terminal 6xHis-Avi-tagged

2. Amino Acid Sequence (2-1024aa)

TMITDSLAVVLQRRDWENPGVTQLNRLAAHPPFASWRNSEEARTDRPSQQLRSLN
GEWRFAPPEAVPESWLECDLPEADTVVPSNWQMHGYDAPIYTNVTYPITVN
PPFVPTENPTGCYSLTFNVDESWLQEGQTRIIFDGVNSAFHLWCNGRWVGYGQDS
RLPSEFDLSAFLRAGENRLAVMVLRWSDGSYLEDDQDMWRMSGIFRDVSLHKKPTT
QISDFHVATRFDNDFSRAVLEAEVQMCCELRLDYLRVTVSLWQGETQVASGTAPFG
GEIIDERGGYADRVTLRLNVENPKLWSAEIPNLYRAVVELHTADGTIEAEACDVGF
REVRIENGLLLLNGKPLLIRGVNRHEHHPLHGQVMDEQTMVQDILLMKQNNFNAVR
CSHYPNHPLWYTLCDRYGLYVDEANIETHGMVPMNRLTDDPRWLPAMSERVTR
MVQRDRNHPSVIIWSLGNESGHGANHDALYRWIKSVDPSPVQYEGGGADTTATD
IICPMYARVDEDQPFPAVPKWSIKKWLSLPGETRPLILCEYAHAMGNSLGGFAKYW
QAFRQYPRLQGGFVWDWVDQSLIKYDENGPNWSAYGGDFGDTPNDRQFCMNGL
VFADRTPHPALTEAKHQQQFFQFRLSGQTIEVTSEYLFRRHSDNELLHWMVALDGKP
LASGEVPLDVAPQGKQLIELPELPQPESAGQLWLTVRVQPNATAWSEAGHISAW
QQWRLAENLSVTLPAAASHAIPHLTTSEMDFCIELGNKRWQFNRRQSGFLSQMWIGD
KKQLLTPLRDQFTRAPLDNDIGVSEATRDPNAWVERWKAAGHYQAEAALLQCTAD
TLADAVLITTAHAWQHQQKTLFISRKTYRIDGSGQMAITVDVEVASDTPHPARIGLNC
QLAQVAERVNWLGLGPQENYPDLRTAACFDRWDLPLSDMYTPYVFPSENGLRCG
TRELNYGPHQWRGDFQFNISRYSSQQQLMETSHRHLLHAEEGTWNIDGFHMGIGG

3. Storage Buffer

Liquid Delivery Form: Tris/PBS-based buffer with 5%-50% glycerol. Custom glycerol content is available upon customer request (please specify requirements when placing orders).

Lyophilized Powder Delivery Form: Pre-lyophilization buffer is Tris/PBS-based buffer containing 6% Trehalose.

4. Storage Conditions

Upon receipt, store the product at -20°C or -80°C. It is recommended to aliquot the protein for multiple uses to avoid repeated freeze-thaw cycles, which may cause protein denaturation and activity loss.

5. Product Description

This product is a recombinant strain K12 lacZ full length of mature protein protein (2-1024aa) expressed in E.coli. The protein is dual-tagged with MBP tag at the N-terminus and 6xHis-Avi tag at the C-terminus, which facilitates protein purification, detection and identification. lacZ, also known as beta-galactosidase, LacZ type, is suitable for related in vitro functional assays, protein interaction studies, antibody preparation and other biomedical research applications.

6. Notes

- Repeated freezing and thawing of the product is strictly prohibited to ensure protein stability and biological activity.
- For special buffer component requirements, please submit a note when purchasing.
- This product is only for scientific research use, not for clinical diagnosis, treatment or commercial production purposes.