

Recombinant mouse Bleomycin Hydrolase/BLMH protein

Catalog Number: ATGP3880

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-455aa

UniProt No.

Q8R016

NCBI Accession No.

NP_848760

Alternative Names

Bleomycin hydrolase, BH, BLM hydrolase, BMH

PRODUCT SPECIFICATION

Molecular Weight

54.9 kDa (478aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 0.1M NaCl, 30% glycerol

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 1,500pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1pmole of Met-AMC to Methionine and AMC per minute at pH7.5 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

BLMH, also known as bleomycin hydrolase, is a member of the papain superfamily of the cysteine protease and the peptidase C1 family. It is a cytoplasmic cysteinepeptidase commonly found as a homohexamer. The normal physiological role of BLMH is unknown, but it protects normal and malignant cells from the glycopeptide

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antitumor drug Blm. It catalyzes the inactivation of the antitumor drug Blm (a glycopeptide) by hydrolyzing the carboxamide bond of its B-aminoalaninamide moiety and also shows general aminopeptidase activity. Recombinant mouse BLMH protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>MNNAGLN SEKVSALIQK LNSDPQFVLA QNVGTTHDLL DICLRRATVQ
GAQHVFQHV V PQEGKPV TNQ KSSGRCWIFS CLNVMRLPFM KKFNIEEFEF SQSYLFFWDK VERCYFFLNA FVDTAQKKEP
EDGRLVQYLL MNPTNDGGQW DMLVNIVEKY GVVPKKCFPE SHTTEATTRM NDILNHKMRE FCIRLRNLVH SGATKGEISS
TQDAMMEEIF RVVICLGNP PETFTWEYRD KDKNYHKIGP ITPLQFYKEH VKPLFNMEDK ICFVNDPRPQ HKYNKLYTVD
YLSNMVGGGRK TLYNNQPIDF LKKMVAASIK DGEAVWFGCD VGKHFNGKLG LSDMNVDYDHE LVFGVSLKNM NKAERLAFGE
SLMTHAMTFT AVSEKDNQEG TFVKWRVENS WGEDHGHKGY LCMTDEWFSE YVYEVVVDKK HVPEEVLAVL EQEPIVLP
AW DPMGALAE

General References

Montoya SE., et al. (2007) Neuroscience. 146(3):890-900.
Suszynska-Zajczyk J., et al. (2014) Mol Genet Metab.112(4):339-46.

DATA

SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

