

Human BLMH / BLM hydrolase Protein (His Tag)

Catalog Number: 11333-H07E



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

BH; BMH; AI035728; Bh; Bmh

Protein Construction:

A DNA sequence encoding the human BLMH (NP_000377.1) (Ser 2-Glu 455) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 88 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to hydrolyze Met-AMC . The specific activity is >500 pmoles/min/μg.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human BLMH consisting of 461 amino acids and has a calculated molecular mass of 53.4 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

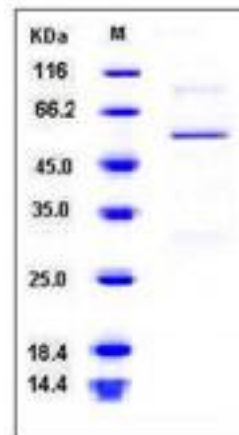
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The papain superfamily member bleomycin hydrolase (BLMH) is a cytoplasmic cysteine peptidase that is highly conserved through evolution. The only known activity of the enzyme is metabolic inactivation of the glycopeptide bleomycin (BLM), an essential component of combination chemotherapy regimens for cancer. The papain superfamily member bleomycin hydrolase (BLMH) is a neutral cysteine protease with structural similarity to a 20S proteasome. Bleomycin (BLM), a clinically used glycopeptide anticancer agent. BLMH is an essential protectant against BLM-induced death and has an important role in neonatal survival and in maintaining epidermal integrity. Sequencing revealed several putative sites phosphorylated by different types of protein kinases, but no signal sequence, transmembrane domain, N-linked glycosylation site or DNA-binding motif.

References

1. Takeda A, *et al.* (1996) Cloning and Analysis of cDNA Encoding Rat Bleomycin Hydrolase, a DNA-Binding Cysteine Protease. *J Biochem.* 120 (2): 353-9.
2. Lefterov IM, *et al.* (2000) Human bleomycin hydrolase regulates the secretion of amyloid precursor protein. *The FASEB Journal.* 14(12): 1837-47.
3. Brmme D, *et al.* (1996) Human Bleomycin Hydrolase: Molecular Cloning, Sequencing, Functional Expression, and Enzymatic Characterization. *Biochemistry.* 35 (21): 6706-14.

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