

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BLMH/Bleomycin Hydrolase in direct ELISAs. It detects human, mouse and rat BLMH/Bleomycin Hydrolase in Western Blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 760239
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BLMH/Bleomycin Hydrolase Ser2-Glu455 Accession # Q13867
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Bleomycin Hydrolase (BLMH) is a cysteine peptidase of the papain superfamily. It is named for its ability to hydrolyze the antitumor agent bleomycin and inactivate it (1). It has a papain-like catalytic triad (Cys-His-Asp) with optimum activity at neutral pH. In mammals it is expressed ubiquitously in all types of tissues and its expression is up-regulated in many tumors. It is present in the cytoplasm as homohexameric protein of approximately 300 kDa. In addition to its aminopeptidase activity, it has homocysteine-thiolactonase activity. BLMH inactivates bleomycin, a glycopeptide anticancer agent, by deaminating it (2). BLMH has been suggested to play a role in the generation of MHC class I-presented peptides (3, 4). Diminished BLMH activity may contribute to the pathology of Alzheimer's disease (AD) (5, 6). It is inhibited by cysteine protease inhibitors such as N-ethylmaleimide, iodoacetamide, para-hydroxymercuribenzoate, and E-64.

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