SANTA CRUZ BIOTECHNOLOGY, INC.

BLM hydrolase (6-YD4): sc-134283

BACKGROUND

BLM hydrolase (bleomycin hydrolase, BLM hydrolase, BMH) is a 455 amino acid protein encoded by the human gene BLMH. BLM hydrolase belongs to the cysteine protease papain superfamily and the peptidase C1 family. It is a cytoplasmic cysteine peptidase commonly found as a homohexamer. It is highly conserved through evolution, however, the only known activity of the enzyme is metabolic inactivation of the glycopeptide bleomycin (BLM). BLM is an essential component of combination chemotherapy regimens for cancer.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BLMH (human) mapping to 17q11.2; Blmh (mouse) mapping to 11 B5.

SOURCE

BLM hydrolase (6-YD4) is a mouse monoclonal antibody raised against recombinant BLM hydrolase protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

BLM hydrolase (6-YD4) is recommended for detection of BLM hydrolase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BLM hydrolase siRNA (h): sc-72654, BLM hydrolase siRNA (m): sc-72655, BLM hydrolase shRNA Plasmid (h): sc-72654-SH, BLM hydrolase shRNA Plasmid (m): sc-72655-SH, BLM hydrolase shRNA (h) Lentiviral Particles: sc-72654-V and BLM hydrolase shRNA (m) Lentiviral Particles: sc-72655-V.

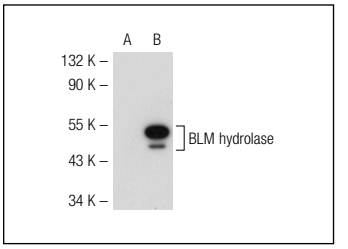
Molecular Weight of BLM hydrolase: 53 kDa.

Positive Controls: BLM hydrolase (m4): 293T Lysate: sc-125060, WEHI-3 cell lysate: sc-3815 or K-562 whole cell lysate: sc-2203.

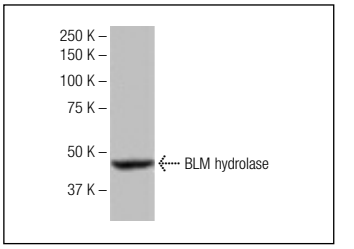
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



BLM hydrolase (6-YD4): sc-134283. Western blot analysis of BLM hydrolase expression in non-transfected: sc-117752 (**A**) and mouse BLM hydrolase transfected: sc-125058 (**B**) 293T whole cell lysates.



BLM hydrolase (6-YD4): sc-134283. Western blot analysis of BLM hydrolase expression in K-562 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.