BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-NM23A/NME1 Antibody Picoband®

Catalog Number: RP1090

About NME1

NME1 (NME/NM23 nucleoside diphosphate kinase 1), also called non-metastatic cells 1, protein (NM23A) expressed in, NM23, NM23-H1, NDPKA, GAAD or AWD, is an enzyme that in humans is encoded by the NME1 gene. The promoters of the mouse and human NME1 genes, like those of other NME genes, contain several binding sites for AP2, NF1, Sp1, LEF1, and response elements to glucocorticoid receptors. The NME1 gene is mapped on 17q21.33. Immunofluorescence microscopy demonstrated colocalization of NME1 in nuclei of B cells expressing EBNA3C. Expression of EBNA3C reversed the ability of NME1 to inhibit migration of BL and breast carcinoma cells. NM23H1 bound SET and was released from inhibition by GZMA cleavage of SET. After GZMA loading or cytotoxic T lymphocyte attack, SET and NM23H1 translocated to the nucleus and SET was degraded, allowing NM23H1 to nick chromosomal DNA. Using a Drosophila model system, Dammai et al. (2003) showed that the Drosophila NME1 homolog, awd, regulates trachea cell motility by modulating FGFR levels through a dynamin -mediated pathway.

Overview

Product Name	Anti-NM23A/NME1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-NM23A/NME1 Antibody catalog # RP1090. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P15531

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human NM23A, different from the related mouse and rat sequences by two amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins

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Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Flow Cytometry(Fixed), 1-3ug/1x10^6 cells, Human

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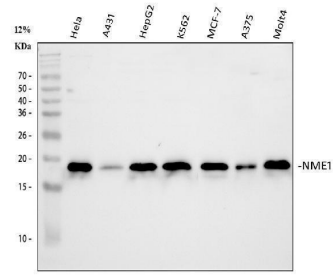
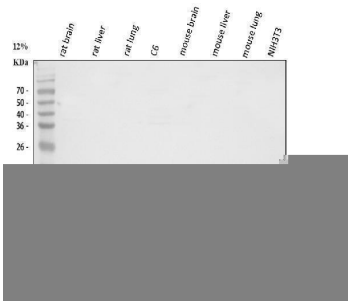
Anti-NM23A/NME1 Antibody Picoband® (RP1090) Images



Western blot analysis of NM23A/NME1 using anti-NM23A/NME1 antibody (RP1090). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: human MCF-7 whole cell lysates, Lane 6: human A375 whole cell lysates, Lane 7: human MOLT-4 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NM23A/NME1 antigen affinity purified polyclonal antibody (Catalog # RP1090) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NM23A/NME1 at approximately 17 kDa. The expected band size for NM23A/NME1 is at 17 kDa.



Western blot analysis of NM23A/NME1 using anti-NM23A/NME1 antibody (RP1090). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: rat lung tissue lysates, Lane 4: rat C6 whole cell lysates, Lane 5: mouse brain tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse lung tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NM23A/NME1 antigen affinity purified polyclonal antibody (Catalog # RP1090) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NM23A/NME1 at approximately 17 kDa. The expected band size for NM23A/NME1 is at 17 kDa.

Flow Cytometry analysis of HEL cells using anti-NM23A/NME1 antibody (RP1090). Overlay histogram showing HEL cells stained with RP1090 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization

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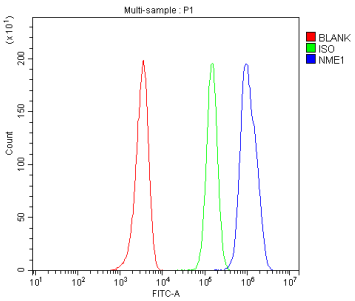

buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NM23A/NME1 Antibody (RP1090, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

1 Publications Citing This Product

1. PubMed ID: 27330777, Mutation of the nm23-H1 gene has a non-dominant role in colorectal adenocarcinoma

Visit bosterbio.com/anti-nm23a-antibody-rp1090-boster.html to see all 1 publications.

Anti-NM23A/NME1 Antibody

For Research Use Only. Not for use in diagnostic procedures.