

Anti-MUM1/IRF4 Antibody Picoband®

Catalog Number: A00401-2

About IRF4

Interferon regulatory factor 4 (IRF4), also known as MUM1, is a protein that in humans is encoded by the IRF4 gene. It is located on 6p25.3. IRF4 is a transcription factor, and it is essential for the development of T helper-2 (Th2) cells, IL17 -producing Th17 cells, and IL9 -producing Th9 cells. In melanocytic cells, the IRF4 gene may be regulated by MITF. IRF4 is a transcription factor that has been implicated in acute leukemia. This gene is strongly associated with pigmentation, sensitivity of skin to sun exposure, freckles, blue eyes, and brown hair color. What's more, IRF4 inhibition is toxic to myeloma cell lines, regardless of transforming oncogenic mechanism.

Overview

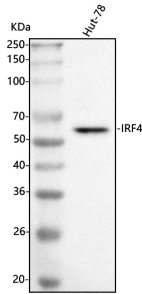
Product Name	Anti-MUM1/IRF4 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-MUM1/IRF4 Antibody Picoband® catalog # A00401-2. Tested in ELISA, IF, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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	ELISA, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	Q15306

Technical Details

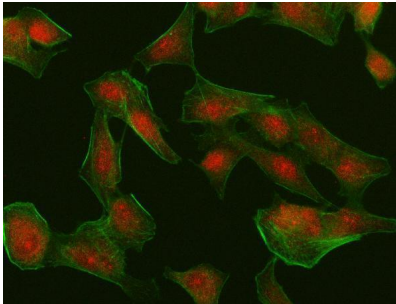
Immunogen	E.coli-derived human MUM1/IRF4 recombinant protein (Position: A163-Q419). Human IRF4 shares 93.4% amino acid (aa) sequence identity with mouse IRF4.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human ELISA, 0.1-0.5 ug/ml, -

Anti-MUM1/IRF4 Antibody Picoband® (A00401-2) Images



Western blot analysis of MUM1/IRF4 using anti-MUM1/IRF4 antibody (A00401-2). 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 Hut-78 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-MUM1/IRF4 antigen affinity purified polyclonal antibody (Catalog # A00401-2) 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 MUM1/IRF4 at approximately 60 kDa. The expected band size for MUM1/IRF4 is at 52 kDa.



IF analysis of IRF4 using anti-IRF4 antibody (A00401-2). IRF4 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-IRF4 Antibody (A00401-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The tissue section was developed using Phalloidin-iFluor 488 Conjugated. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-MUM1/IRF4 Antibody

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