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Anti-PITRM1 Antibody Picoband™

Catalog Number: A08969-1

About PITRM1

Pitrilysin metallopeptidase 1 also known as presequence protease, mitochondrial (PreP) and metalloprotease 1 (MTP-1) is an enzyme that in humans is encoded by the PITRM1 gene. The protein encoded by this gene is an ATP-dependent metalloprotease that degrades post-cleavage mitochondrial transit peptides. The encoded protein binds zinc and can also degrade amyloid beta A4 protein, suggesting a possible role in Alzheimer's disease.

Overview

Product Name	Anti-PITRM1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PITRM1 Antibody Picoband™ catalog # A08969-1. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
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	Q5JRX3

Technical Details

Immunogen	E.coli-derived human PITRM1 recombinant protein (Position: A33-K1037).
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	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	Dilute the sample so that the expected range of concentrations fall within the detection range of this

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	kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry, 1-3 ug/1x10^6 cells, Human Direct ELISA, 0.1-0.5 ug/ml, Human

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Anti-PITRM1 Antibody Picoband™ (A08969-1) Images

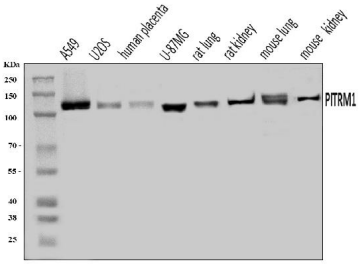

Figure 1. Western blot analysis of PITRM1 using anti-PITRM1 antibody (A08969-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human A549 whole cell lysates,
Lane 2: human U20S whole cell lysates,
Lane 3: human placenta tissue lysates,
Lane 4: human U-87MG whole cell lysates,
Lane 5: rat lung tissue lysates,
Lane 6: rat kidney tissue lysates,
Lane 7: mouse lung tissue lysates,
Lane 8: mouse kidney tissue 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-PITRM1 antigen affinity purified polyclonal antibody (Catalog # A08969-1) 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 PITRM1 at approximately 117 kDa. The expected band size for PITRM1 is at 117 kDa.

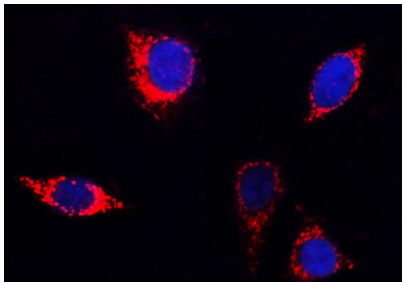

Figure 2. IF analysis of PITRM1 using anti-PITRM1 antibody (A08969-1).
PITRM1 was detected in an immunocytochemical section of SiHa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PITRM1 Antibody (A08969-1) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

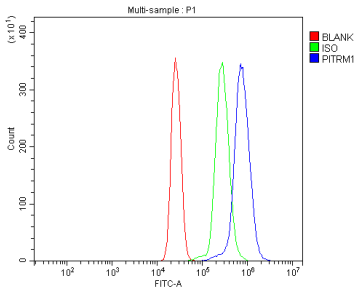

Figure 3. Flow Cytometry analysis of U937 cells using anti-PITRM1 antibody (A08969-1).
Overlay histogram showing U937 cells stained with A08969-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PITRM1 Antibody (A08969-1, 1 ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used

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as a control.

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