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antibody and ELISA experts

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Anti-AIMP2/p38 Antibody Picoband®

Catalog Number: PA1481

About AIMP2

AIMP2, Aminoacyl tRNA synthetase complex-interacting multifunctional protein 2, also known as AIMP2, is an enzyme that in humans is encoded by the AIMP2 gene. AIMP2 encodes a predicted 312-amino acid protein. The AIMP2 gene is located on chromosome 7p22 flanked by two genes, HRI and PMS2. AIMP2 and HRI overlap slightly and are arranged in a tail-to-tail fashion. AIMP2 and PMS2 are separated by approximately 200 base pairs and are arranged head-to-head. AIMP2 is transcribed in the opposite direction compared to HRI and PMS2. AIMP2 is a scaffold required for the assembly and stability of the multi-tRNA synthetase complex. AIMP2 can work as a mediator of TGF-beta signaling and its functional importance in the control of MYC during lung differentiation.

Overview

Product Name	Anti-AIMP2/p38 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-AIMP2/p38 Antibody catalog # PA1481. Tested in IHC, 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	Q13155

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human AIMP2/p38, different from the related rat and mouse sequences by three amino acids.
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 IHC(P).

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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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

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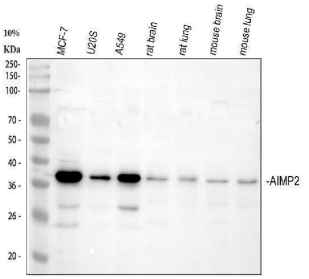
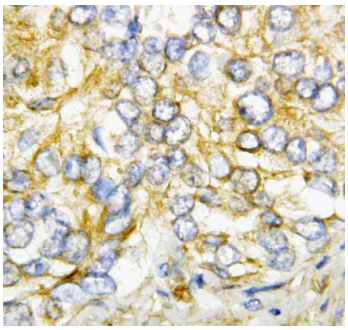
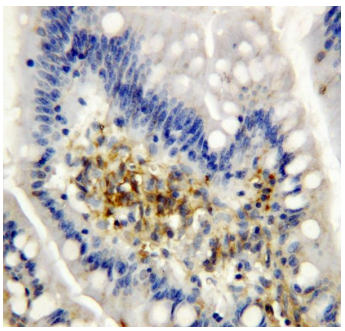
Anti-AIMP2/p38 Antibody Picoband® (PA1481) Images



Western blot analysis of AIMP2/P38 using anti-AIMP2/P38 antibody (PA1481). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: hman A549 whole cell lysates, Lane 4: rat brain tissue lysates, Lane 5: rat lung tissue lysates, Lane 6: mouse brain tissue lysates, Lane 7: mouse lung 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-AIMP2/P38 antigen affinity purified polyclonal antibody (PA1481) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for AIMP2/P38 at approximately 36 kDa. The expected band size for AIMP2/P38 is at 36 kDa.



IHC analysis of AIMP2 using anti-AIMP2 antibody (PA1481). AIMP2 was detected in paraffin-embedded section of human rectal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-AIMP2 Antibody (PA1481) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of AIMP2 using anti-AIMP2 antibody (PA1481). AIMP2 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-AIMP2 Antibody (PA1481) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

6 Publications Citing This Product

1. PubMed ID: 33856409, Wu T,Liu Q,Li Y,Li H,Chen L,Yang X,Tang Q,Pu S,Kuang J,Li R,Huang Y,Zhang J,Zhang Z,Zhou J,Huang C,Zhang G,Zhao Y,Zou M,Jiang W,Mo L,He J.Feeding-induced hepatokine, Manf, ameliorates diet-induced obesity by promoting adipose browning via p38 MAPK

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pathway.J Exp Med.2021 Jun 7;218(6):e20201203.doi:10. 1084/jem. 20201203.PMID:33856409.

2. PubMed ID: 32794226, Ma G,Kimatu BM,Yang W,Pei F,Zhao L,Du H,Su A,Hu Q,Xiao H.Preparation of newly identified polysaccharide from Pleurotus eryngii and its anti-inflammation activities potential.J Food Sci.2020 Sep;85(9):2822-2831. doi:10.1111/1750-3841.15375.Epub 2020 Aug 14

3. PubMed ID: 31566725, Ji F,Wang Y,Yuan J,Wu Q,Wang J,Liu D.The potential role of stromal cell-derived factor-1alpha/CXCR4/CXCR7 axis in adipose-derived mesenchymal stem cells.J Cell Physiol.2020 Apr;235(4):3548-3557.doi:10.1002/jcp.29243.Epub 2019 Sep 30.PMID:31566725.

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Anti-AIMP2/p38 Antibody

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