

AIM2 Polyclonal Antibody | anti-AIM2 antibody

Anti-AIM2 Antibody

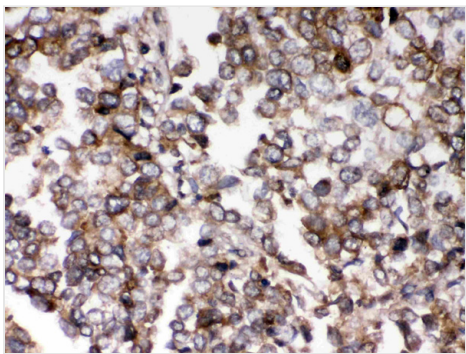
CATALOG # AAA46356	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

AIM2; Polyclonal Antibody; Anti-AIM2 Antibody; Interferon-inducible protein AIM2; Absent in melanoma 2; AIM 2; Aim2; AIM2_HUMAN; OTTHUMP00000035296; PYHIN4; absent in melanoma 2; anti-AIM2 antibody

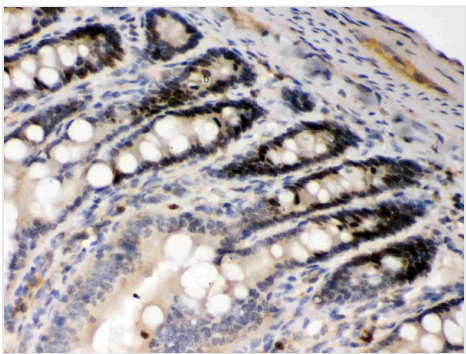
PRODUCT SPECIFICATIONS

Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	No cross reactivity with other proteins
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	343
Applicable Applications for anti-AIM2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human AIM2 recombinant protein (Position: L14-H215). Human AIM2 shares 53.8% amino acid (aa) sequence identity with mouse AIM2.
Reconstitution	0.2mL of distilled water will yield a concentration of 500ug/mL
Relevant Detection Systems	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG (please inquire) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (please inquire) for IHC(P).
Preparation and Storage	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquoted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.



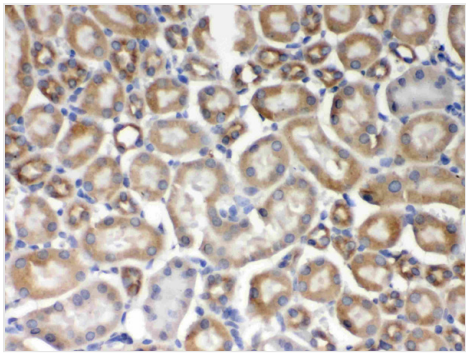
IHC (Immunohistochemistry)

IHC analysis of AIM2 using anti-AIM2 antibody (AAA46356).AIM2 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-AIM2 Antibody (AAA46356) 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 Streptavidin-Biotin-Complex (SABC) (Catalog # please inquire) with DAB as the chromogen.



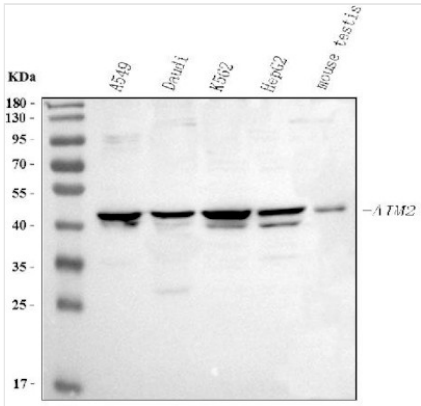
IHC (Immunohistochemistry)

IHC analysis of AIM2 using anti-AIM2 antibody (AAA46356).AIM2 was detected in a paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-AIM2 Antibody (AAA46356) 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 Streptavidin-Biotin-Complex (SABC) (Catalog # please inquire) with DAB as the chromogen.



IHC (Immunohistochemistry)

IHC analysis of AIM2 using anti-AIM2 antibody (AAA46356).AIM2 was detected in a paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-AIM2 Antibody (AAA46356) 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 Streptavidin-Biotin-Complex (SABC) (Catalog # please inquire) with DAB as the chromogen.



WB (Western Blot)

Western blot analysis of AIM2 using anti-AIM2 antibody (AAA46356).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 Daudi whole cell lysates,Lane 3: human K562 whole cell lysates,Lane 4: human HepG2 whole cell lysates,Lane 5: mouse testis 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-AIM2 antigen affinity purified polyclonal antibody (Catalog # AAA46356) 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 # please inquire) with Tanon 5200 system. A specific band was detected for AIM2 at approximately 45 kDa. The expected band size for AIM2 is at 39,40-45 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-AIM2 antibody	Description: Rabbit IgG polyclonal antibody for Interferon-inducible protein AIM2(AIM2) detection. Tested with WB, IHC-P in Human;Mouse;Rat. Background: Interferon-inducible protein AIM2, also known as absent in melanoma 2 or simply AIM2, is a protein that in humans is encoded by the AIM2 gene. It is mapped to 1q22. AIM2 is a member of the Ifi202/IFI16 family. It plays a putative role in tumorigenic reversion and may control cell proliferation. Interferon-gamma induces expression of AIM2. Though there has been virtually no biochemistry performed, a model based on cell-based or in vivo experiments has led to the current model of how AIM2 triggers the inflammasome. The C-terminal HIN domain binds double stranded DNA (either viral, bacterial, or even host) and acts as a cytosolic dsDNA sensor. This leads to the oligomerization of the inflammasome complex. The N-terminal pyrin domain of AIM2 interacts with the pyrin domain of another protein ASC (or Apoptosis-associated Speck-like protein containing a caspase activation and recruitment domain). ASC also contains a CARD domain (caspase activation and recruitment domain), that recruits procaspase-1 to the complex. This leads to the autoactivation of caspase-1, an enzyme that processes proinflammatory cytokines (IL-1b and IL-18).
References	1. DeYoung KL, Ray ME, Su YA, Anzick SL, Johnstone RW, Trapani JA, Meltzer PS, Trent JM (Aug 1997). "Cloning a novel member of the human interferon-inducible gene family associated with control of tumorigenicity in a model of human melanoma". <i>Oncogene</i> 15 (4): 453-7. 2. "Entrez Gene: AIM2 absent in melanoma 2". 3. Woerner SM, Kloor M, Schwitalle Y, Youmans H, von Knebel Doeberitz M, Gebert J, Dihlmann S (2007). "The putative tumor suppressor AIM2 is frequently affected by different genetic alterations in microsatellite unstable colon cancers". <i>Genes Chromosomes Cancer</i> 46 (12): 1080-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4757734
NCBI GeneID	9447
NCBI Accession #	NP_004824.1
NCBI GenBank Nucleotide #	NM_004833.1
UniProt Accession #	O14862; Q5T3V9; Q96FG9; A8K7M7
NCBI Official Full Name	interferon-inducible protein AIM2
NCBI Official Synonym Full Names	absent in melanoma 2
NCBI Official Symbol	AIM2
NCBI Official Synonym Symbols	PYHIN4
NCBI Protein Information	interferon-inducible protein AIM2
UniProt Protein Name	Interferon-inducible protein AIM2
UniProt Gene Name	AIM2
UniProt Entry Name	AIM2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aim2-antibody-immunohistochemistry-western-blot-elisa/46356>