

Rabbit AIM2 Polyclonal Antibody | anti-AIM2 antibody

AIM2 (N-terminal region) Antibody

CATALOG # AAA71566	HOST Rabbit	REACTIVITY Human, Rat, Mouse	APPLICATIONS ELISA, Western Blot
------------------------------	-----------------------	--	--

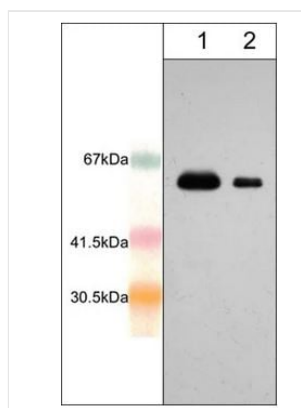
PRODUCT SYNONYMS

AIM2; Polyclonal Antibody; AIM2 (N-terminal region) Antibody; AIM2 (N-terminal region); AIM; anti-AIM2 antibody

PRODUCT SPECIFICATIONS

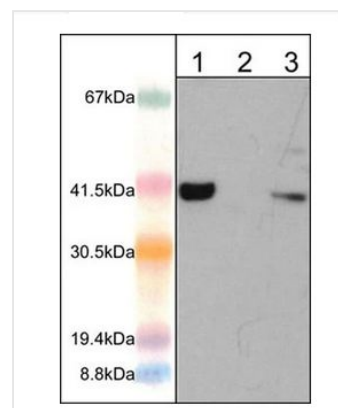
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was affinity purified using AIM2 (N-terminal region) peptide (without carrier). The antibody detects a 40kDa* doublet corresponding to AIM2 in immunoblots of Jurkat cells, as well as mouse macrophages treated with IFNgamma and LPS.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-AIM2 antibody	ELISA, WB (Western Blot)
Immunogen	AIM2 synthetic peptide (coupled to KLH) corresponds to amino acid residues in the N-terminal region of human AIM2. This peptide sequence is highly conserved in rat and mouse AIM2.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



WB (Western Blot)

Western blot analysis of human recombinant AIM2 full length sequence with N-terminal GST tag (62kDa). The blot was probed with rabbit polyclonal anti-AIM2 (N-terminal region) antibody at 1:250 (lane 1) and 1:1000 (lane 2).



WB (Western Blot)

Western blot analysis of human Jurkat cells (lane 1), mouse macrophages untreated (lane 2) and treated (lane 3) with IFNgamma (10 ng/ml) and LPS (1ug/ml) for 12 hr (20 ug/lane). The blot was probed with rabbit polyclonal anti-AIM2 (N-terminal region) antibody at 1:1000.

ADDITIONAL INFORMATION

Related Product Information for anti-AIM2 antibody	Host- and pathogen-associated cytoplasmic double-stranded DNA triggers the activation of a NALP3-independent inflammasome, which activates caspase-1, leading to maturation of pro-interleukin-1beta and inflammation. Several studies have isolated AIM2 (absent in melanoma 2) as a candidate cytoplasmic-DNA-sensing protein that contains an N-terminal pyrin domain and C-terminal oligonucleotide binding domain. A screen for transcripts induced by interferon-beta identified AIM2 gene expression. AIM2 protein bound double-stranded DNA, recruited the inflammasome adaptor ASC, and localized to ASC containing speckles. AIM2 and ASC form a pyroptosome, which induces pyroptotic cell death mediated by caspase-1. RNA-mediated suppression of AIM2 expression impairs DNA-induced maturation of interleukin-1beta in THP-1 human monocytic cells, as well as abrogates caspase-1 activation in response to cytoplasmic double-stranded DNA and the double-stranded DNA vaccinia virus. Thus, AIM2 is a DNA-sensing protein for the activation of the caspase-1 inflammasome.
References	Bürckstümmer, T. et al. (2009). Nat Immunol. 10(3):266. Fernandes-Alnemri, T. (2009) Nature. 458(7237):509. Hornung, V. et al. (2009). Nature. 458(7237):514. Roberts, T.L. et al. (2009). Science. 323(5917):1057.

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
Molecular Weight	38,954 Da
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.