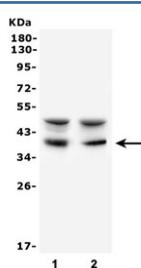


AIM2 Antibody (R31802)

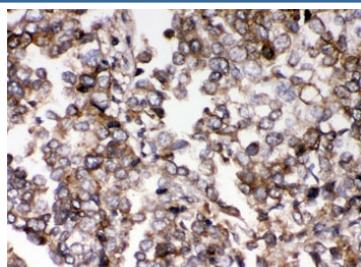
Catalog No.	Formulation	Size
R31802	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

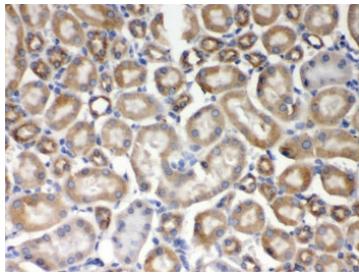
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O14862
Localization	Cytoplasmic, membrane, nuclear
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml
Limitations	This AIM2 antibody is available for research use only.



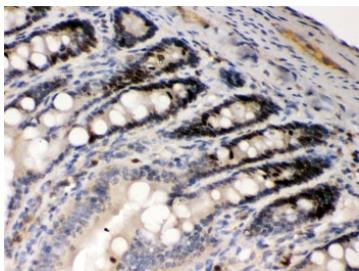
Western blot testing of 1) human Raji and 2) mouse NIH3T3 cell lysate with AIM2 antibody. Expected molecular weight: 40-45 kDa.



IHC testing of FFPE human lung cancer tissue with AIM2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE mouse kidney with AIM2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat intestine with AIM2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

Absent In Melanoma 2 is a protein that in humans is encoded by the AIM2 gene. 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 pro-caspase-1 to the complex. This leads to the autoactivation of caspase-1, an enzyme that processes proinflammatory cytokines (IL-1 β and IL-18).

Application Notes

Optimal dilution of the AIM2 antibody should be determined by the researcher.

Immunogen

Amino acids 14-215 of human AIM2 were used as the immunogen for the AIM2 antibody.

Storage

After reconstitution, the AIM2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

