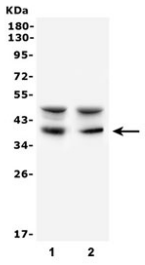
AIM2 Antibody (R31802)

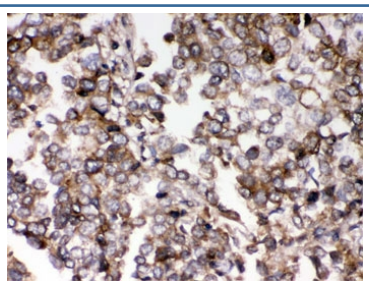
Catalog No.	Formulation	Size
R31802	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

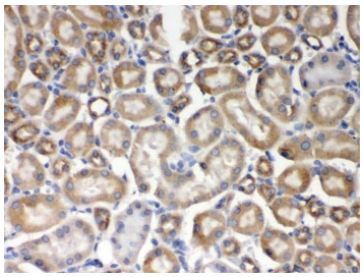
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O14862
Localization	Cytoplasmic, membrane, 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.



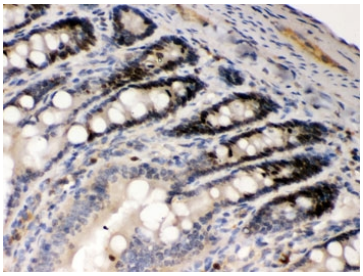
Western blot testing of 1) human Raji and 2) mouse NIH3T3 cell lysate with AIM2 antibody. Expected molecular weight: 40-45 kDa.



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 procaspase-1 to the complex. This leads to the autoactivation of caspase-1, an enzyme that processes proinflammatory cytokines (IL-1b 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 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.