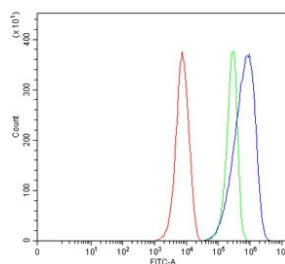


## Aim2 Antibody (RQ6928)

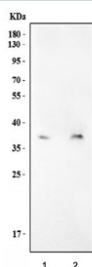
| Catalog No. | Formulation                                           | Size   |
|-------------|-------------------------------------------------------|--------|
| RQ6928      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

|                           |                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------|
| <b>Availability</b>       | 1-3 business days                                                                                 |
| <b>Species Reactivity</b> | Mouse                                                                                             |
| <b>Format</b>             | Antigen affinity purified                                                                         |
| <b>Clonality</b>          | Polyclonal (rabbit origin)                                                                        |
| <b>Isotype</b>            | Rabbit IgG                                                                                        |
| <b>Purity</b>             | Antigen affinity purified                                                                         |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose                                                         |
| <b>UniProt</b>            | Q91VJ1                                                                                            |
| <b>Applications</b>       | Western Blot : 0.5-1 ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml |
| <b>Limitations</b>        | This Aim2 antibody is available for research use only.                                            |



Flow cytometry testing of mouse RAW264.7 cells with Aim2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Aim2 antibody.



Western blot testing of mouse 1) RAW264.7 and 2) NIH 3T3 cell lysate with Aim2 antibody. Predicted molecular weight ~39 kDa.

## Description

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-1 $\beta$  and IL-18).

## Application Notes

Optimal dilution of the Aim2 antibody should be determined by the researcher.

## Immunogen

Recombinant mouse Aim2 protein (amino acids Q136-E354) was 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.