

### IRGQ Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4931a

### Specification

# IRGQ Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, FC, IHC-P,E <u>O8WZA9</u> Human Rabbit Polyclonal Rabbit IgG 14-43

## **IRGQ Antibody (N-term) - Additional Information**

Gene ID 126298

Other Names Immunity-related GTPase family Q protein, IRGQ, IRGQ1

Target/Specificity

This IRGQ antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 14-43 amino acids from the N-terminal region of human IRGQ.

Dilution WB~~1:1000 FC~~1:10~50 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** IRGQ Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# IRGQ Antibody (N-term) - Protein Information

Name IRGQ {ECO:0000303|PubMed:39481378, ECO:0000312|HGNC:HGNC:24868}

Function Autophagy receptor that specifically promotes clearance of misfolded MHC class I



molecules by targeting them to the lysosome for degradation (PubMed:<u>39481378</u>). Acts as a molecular adapter that specifically recognizes and binds (1) misfolded MHC class I molecules following their ubiquitination, as well as (2) autophagy-related proteins, promoting the recruitment of misfolded MHC class I molecules to autophagy machinery for degradation (PubMed:<u>39481378</u>). Degradation of misfolded MHC class I molecules is essential to prevent accumulation of defective MHC class I complexes at the surface of CD8(+) T-cells and prevent a stronger T-cell-mediated response (PubMed:<u>39481378</u>). In contrast to other members of the family, does not show GTPase activity (PubMed:<u>39481378</u>).

**Cellular Location** Lysosome. Cytoplasmic vesicle, autophagosome

## **IRGQ Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## IRGQ Antibody (N-term) - Images



Western blot analysis of IRGQ Antibody (N-term) (Cat. #AP4931a) in MCF-7 cell line lysates (35ug/lane). IRGQ (arrow) was detected using the purified Pab.





IRGQ Antibody (N-term) (Cat. #AP4931a) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the IRGQ Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



IRGQ Antibody (N-term) (Cat. #AP4931a) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## **IRGQ Antibody (N-term) - References**

Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007)