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IRGQ Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4931a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8WZA9
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24883
Calculated MW	62717
Antigen Region	14-43

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 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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:39481378). Acts as a molecular adapter that specifically recognizes and binds (1) misfolded MHC class I molecules following their ubiquitination,

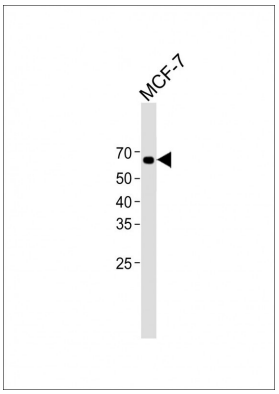
as well as (2) autophagy-related proteins, promoting the recruitment of misfolded MHC class I molecules to autophagy machinery for degradation (PubMed:39481378). Degradation of misfolded MHC class I molecules is essential to prevent accumulation of defective MHC class I complexes at the surface of CD8(+) T-cells and prevent a stronger T-cell-mediated response (PubMed:39481378). In contrast to other members of the family, does not show GTPase activity (PubMed:39481378).

Cellular Location Lysosome. Cytoplasmic vesicle, autophagosome

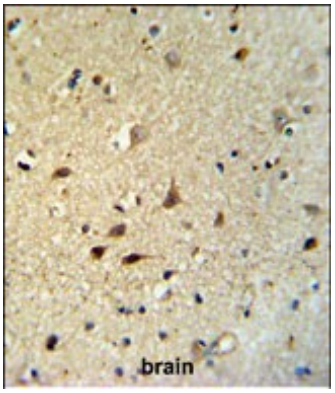
References

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)

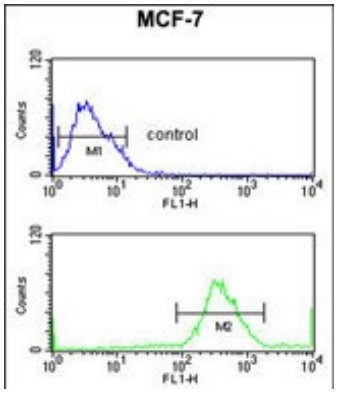
Images



All lanes: Anti-IRGQ Antibody (N-term) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 63 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.