

Datasheet for 600-401-CA9**IRGM Antibody****Overview**

Description:	Anti-IRGM (RABBIT) Antibody - 600-401-CA9
Item No.:	600-401-CA9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components. Two of the strongest hits implicate genes IRGM and ATG16L1, which encode proteins thought to be critical to the autophagy pathway and being significantly associated with Crohn's disease. IRGM induces autophagy and generates large autolysosomal organelles as a mechanism for the elimination of intracellular Mycobacterium tuberculosis. In mouse, IRGM belongs to a family of gamma-interferon-induced GTP-binding proteins of approximately 48 kDa that also includes IRGM2 and IRGM3; this antibody may also recognize these proteins.
Synonyms:	IRGM Antibody, IFI1, IRGM1, LRG47, LRG-47, IFI1, Immunity-related GTPase family M protein, Immunity-related GTPase family M protein 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IRGM
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-IRGM antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the internal region of the human IRGM.
Purity/Specificity:	Anti-IRGM Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with IRGM from other sources has not been determined.
Relevant Links:	• UniProtKB - A1A4Y4 • GeneID - 345611 • NCBI - AAI28169

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-IRGM Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 20 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1:10,000 - 1:20,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

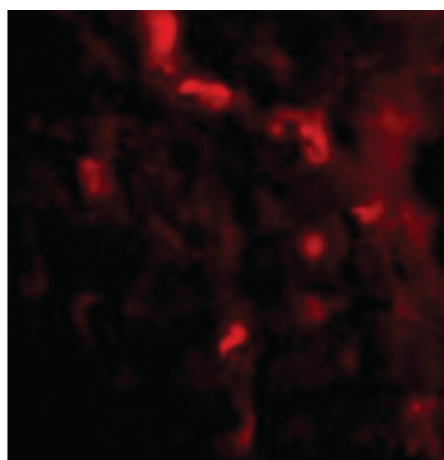
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

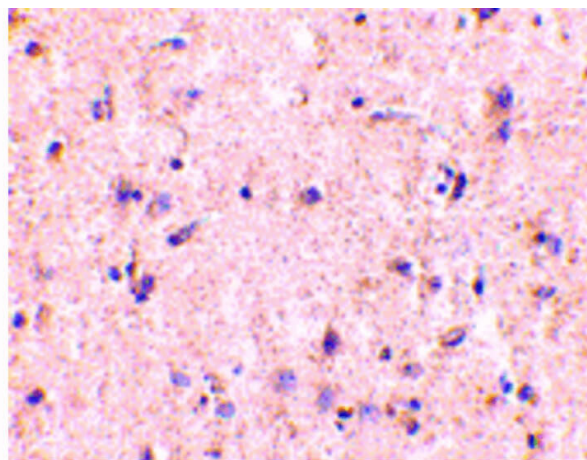
Expiration: Expiration date is one (1) year from date of receipt.

Images



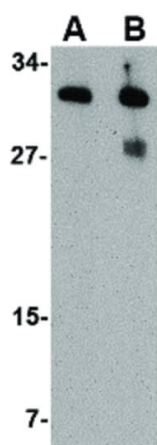
Immunofluorescence Microscopy

Immunofluorescence Microscopy of IRGM antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: IRGM antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: IRGM as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of IRGM antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: IRGM antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: IRGM is nuclear and occasionally cytoplasmic. Staining: IRGM as a precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of IRGM antibody. Lane A: Human brain lysate at 1 μ g/mL. Lane B: Human brain lysate at 2 μ g/mL. Load: 35 μ g per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 20.1 kDa, ~30 kDa for IRGM.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.