

IRGC Antibody

Catalog # ASC10956

Specification

IRGC Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host

Clonality Isotype

Application Notes

WB, ICC, IF Q6NXR0

NP_062558, 10257429 Human, Mouse, Rat

Rabbit Polyclonal

IgG

IRGC antibody can be used for detection of

IRGC by Western blot at 1 - 2 μ g/mL.

Antibody can also be used for

immunocytochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

IRGC Antibody - Additional Information

Gene ID **56269**

Target/Specificity

IRGC; Two isoforms of IRGC are known to exist; this antibody will recognize both isoforms.

Reconstitution & Storage

IRGC antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

IRGC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IRGC Antibody - Protein Information

Name IRGC

Synonyms IIGP5, IRGC1

IRGC Antibody - Protocols

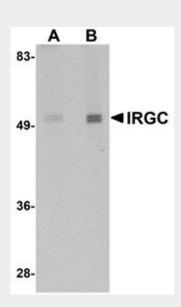
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

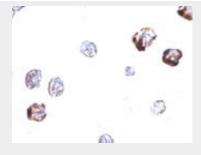


- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

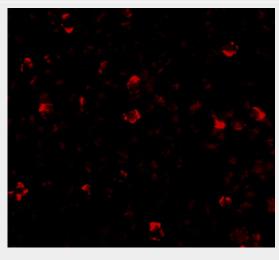
IRGC Antibody - Images



Western blot analysis of IRGC in mouse brain tissue lysate with IRGC antibody at (A) 1 and (B) 2 $\mu g/mL$.



Immunocytochemistry of IRGC in A20 cells with IRGC antibody at 2.5 $\mu g/mL$.



Immunofluorescence of IRGCb in A20 cells with IRGCb antibody at 20 $\mu g/mL$.



IRGC Antibody - Background

IRGC Antibody: Immunity-related GTPases (IRG) (also known as p47 GTPases) are a family of GTPase proteins found in vertebrates, which play critical roles in mediating innate resistance to intracellular pathogens. IRG genes have been found in a number of mammals and lower species including mice, rats, zebrafish and humans. Most of the mouse genes contain interferon-stimulated response elements which mediate transcriptional activation by IFNs. In humans, only two IRG genes have been found: human IRGC encodes a full-length IRG protein that, like the mouse homologue, is constitutively expressed in testis, while human IRGM encodes a considerably truncated protein that is constitutively expressed in cultured cells including some macrophage cell lines. As the two human genes IRGC and IRGM are not subject to IFN control, it has been suggested that the host resistance mechanism supported by IRG proteins in the mouse is lacking in humans.

IRGC Antibody - References

Taylor GA. IRG proteins: key mediators of interferon-regulated host resistance to intracellular pathogens. Cell Microbiol.2007; 9:1099-107.

Yamada K, Akimoto H, Ogawa Y, et al. Upregulation of immunity-related GTPase (IRG) proteins by TNF-alpha in murine astrocytes. Biochem. Biophys. Res. Commun. 2009; 382:434-9.

Singh SB, et al. Human IRGM induces autophagy to eliminate intracellular mycobacteria. Science2006; 313:1438-41.

Bekpen C, Hunn JP, Rohde C, et al. The interferon-inducible p47 (IRG) GTPases in vertebrates: loss of the cell autonomous resistance mechanism in the human lineage. Genome Biol.2005; 6:R92.