

IRG1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18784c

Specification

IRG1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	A6NK06
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	306-332

IRG1 Antibody (Center) - Additional Information

Gene ID 730249

Other Names

Cis-aconitate decarboxylase, CAD, Aconitate decarboxylase, Cis-aconitic acid decarboxylase, Immune-responsive gene 1 protein, IRG1

Target/Specificity

This IRG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 306-332 amino acids from the Central region of human IRG1.

Dilution

WB~~1:1000

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

IRG1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IRG1 Antibody (Center) - Protein Information

Name ACOD1 ([HGNC:33904](#))

Function Cis-aconitate decarboxylase that catalyzes production of itaconate and is involved in the inhibition of the inflammatory response (PubMed:[23609450](#), PubMed:[23610393](#), PubMed:[31548418](#), PubMed:[35662396](#)). Acts as a negative regulator of the Toll-like receptors

(TLRs)-mediated inflammatory innate response by stimulating the tumor necrosis factor alpha-induced protein TNFAIP3 expression via reactive oxygen species (ROS) in LPS-tolerized macrophages (PubMed:[23609450](#)). Involved in antimicrobial response of innate immune cells; ACOD1-mediated itaconic acid production contributes to the antimicrobial activity of macrophages by generating itaconate, leading to alkylation of proteins, such as TFEB (PubMed:[23610393](#), PubMed:[35662396](#)). Involved in antiviral response following infection by flavivirus in neurons: ACOD1-mediated itaconate production inhibits the activity of succinate dehydrogenase, generating a metabolic state in neurons that suppresses replication of viral genomes (By similarity). Plays a role in the embryo implantation (By similarity).

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:P54987}.

Tissue Location

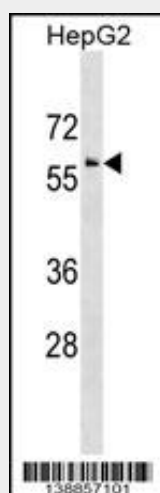
Expressed in LPS-tolerized macrophages (at protein level). Expressed in peripheral blood mononuclear cells (PBMCs), microglia and macrophage cells.

IRG1 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IRG1 Antibody (Center) - Images



IRG1 Antibody (Center)(Cat. #AP18784c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the IRG1 antibody detected the IRG1 protein (arrow).

IRG1 Antibody (Center) - Background

The function of this protein remains unknown.