

## **IRG1** Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56366

# **Specification**

## **IRG1** Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality

IHC-P, IHC-F, IF, ICC, E
A6NK06
Human
Rabbit
Polyclonal

# **IRG1** Polyclonal Antibody - Additional Information

### Gene ID 730249

### **Other Names**

Cis-aconitate decarboxylase, CAD, 4.1.1.6, Aconitate decarboxylase, Aconitate decarboxylase 1 {ECO:0000312|HGNC:HGNC:33904}, Cis-aconitic acid decarboxylase, Immune-responsive gene 1 protein, ACOD1 (<a

href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=33904" target=" blank">HGNC:33904</a>), IRG1

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

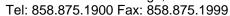
## **IRG1** Polyclonal Antibody - Protein Information

### Name ACOD1 (HGNC:33904)

### **Function**

Cis-aconitate decarboxylase that catalyzes production of itaconate and is involved in the inhibition of the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/23609450" target="\_blank">23609450</a>, PubMed:<a href="http://www.uniprot.org/citations/23610393" target="\_blank">23610393</a>, PubMed:<a href="http://www.uniprot.org/citations/31548418" target="\_blank">31548418</a>, PubMed:<a href="http://www.uniprot.org/citations/35662396" target="\_blank">35662396</a>). 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:<a href="http://www.uniprot.org/citations/23609450" target="\_blank">23609450</a>, 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:<a href="http://www.uniprot.org/citations/23610393" target="\_blank">23610393</a>, PubMed:<a href="http://www.uniprot.org/citations/23610393" target="\_blank">23610393</a>, PubMed:<a







href="http://www.uniprot.org/citations/35662396" target="\_blank">35662396</a>). 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** Polyclonal Antibody - Protocols

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

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

**IRG1** Polyclonal Antibody - Images