

For Research Use Only

IRG1 Polyclonal antibody

Catalog Number: 28436-1-AP

6 Publications



Basic Information

Catalog Number:

28436-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG28913

GenBank Accession Number:

NM_001258406

GeneID (NCBI):

730249

UNIPROT ID:

A6NK06

Full Name:

immunoresponsive 1 homolog (mouse)

Calculated MW:

53 kDa

Observed MW:

50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse

Cited Species:

human, mouse

Positive Controls:

WB: IFN gamma+LPS treated THP-1 cells, LPS treated RAW 264.7 cells

Background Information

The host Immune-Responsive Gene 1 (IRG1; also called Acod1) is a mitochondrial enzyme induced under inflammatory conditions that produces the metabolite itaconate by decarboxylating cis-aconitate, a TCA cycle intermediate. Gene expression profiling studies of murine macrophages and microglial cells have revealed that IRG1 is highly expressed under pro-inflammatory conditions. Furthermore, IRG1 is highly expressed in the pregnant uterus during the early events leading to implantation, the specific phase of pregnancy in which high levels of inflammatory cytokines are secreted. IRG1 localizes to the mitochondria and may represent a key link between immunological and metabolic processes. IRG1 has crucial functions in embryonic implantation and neurodegeneration. Also, IRG1 promotes endotoxin tolerance by increasing A20 expression in macrophages via increased ROS production. (PMID: 25640654)

Notable Publications

Author	Pubmed ID	Journal	Application
Liwu Zeng	39910615	Cell Commun Signal	WB
Guanjun Li	39901156	Cell Commun Signal	WB
Fang Wang	39870006	Int Immunopharmacol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

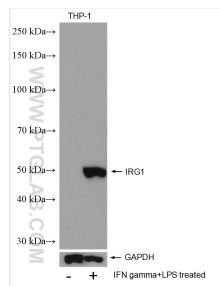
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



IFN gamma+LPS treated THP-1 cells were subjected to SDS PAGE followed by western blot with 28436-1-AP (IRG1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.