For Research Use Only

IRG1 Polyclonal antibody

Catalog Number: 28436-1-AP



Basic Information

Catalog Number: GenBank Accession Number:

28436-1-AP NM_001258406

Size: GeneID (NCBI):
150ul , Concentration: 1000 μg/ml by 730249

Source: immunoresponsive 1 homolog

Full Name:

Rabbit (mouse)

Isotype: Calculated MW:
IgG 53 kDa

Immunogen Catalog Number: Observed MW:
AG28913 50 kDa

Antigen affinity purification Recommended Dilutions: WB 1:500-1:2000

Purification Method:

Applications

Tested Applications: Positive Controls:

WB; ELISA WB: IFN gamma+LPS treated THP-1 cells, LPS treated

RAW 264.7 cells

Human, Mouse

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)

Storage

Storage:

Nanodrop;

Species Specificity:

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

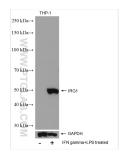
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1%BSA

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.