

For Research Use Only

IRG1 Polyclonal antibody

Catalog Number: 28436-1-AP **3 Publications**



Basic Information

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| Catalog Number: 28436-1-AP | GenBank Accession Number: NM_001258406 | Purification Method: Antigen affinity purification |
| Size: 700 µg/ml | GeneID (NCBI): 730249 | Recommended Dilutions: WB 1:500-1:2000 |
| Source: Rabbit | UNIPROT ID: A6NK06 | |
| Isotype: IgG | Full Name: immunoresponsive 1 homolog (mouse) | |
| Immunogen Catalog Number: AG28913 | Calculated MW: 53 kDa | |
| | Observed MW: 50 kDa | |

Applications

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|---|--|
| Tested Applications: WB, ELISA | Positive Controls: WB : IFN gamma+LPS treated THP-1 cells, LPS treated RAW 264.7 cells |
| Cited Applications: WB | |
| Species Specificity: human, mouse | |
| Cited Species: 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)

Notable Publications

| Author | Pubmed ID | Journal | Application |
|------------|-----------|---------------------|-------------|
| Ru-Xue Qin | 39618923 | J Inflamm Res | WB |
| Pei Zhou | 38788445 | Int Immunopharmacol | WB |
| Pei Zhou | 38641760 | Apoptosis | WB |

Storage

Storage:
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

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

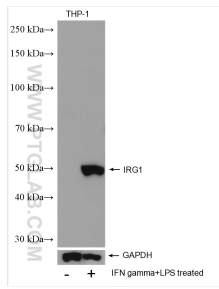
T: 4006900926

E: Proteintech-CN@ptglab.com

W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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.