

For Research Use Only

IRG1 Recombinant monoclonal antibody

Catalog Number: 86725-1-RR



Basic Information

Catalog Number: 86725-1-RR	GenBank Accession Number: NM_001258406	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 730249	CloneNo.: 251531C12
Source: Rabbit	UNIPROT ID: A6NK06	Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:250-1:1000
Isotype: IgG	Full Name: immunoresponsive 1 homolog (mouse)	
Immunogen Catalog Number: AG28913	Calculated MW: 53 kDa	
	Observed MW: 53 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : LPS treated RAW 264.7 cells, IFN gamma and LPS treated THP-1 cells
	IF/ICC : 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)

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

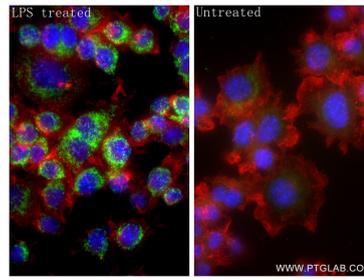
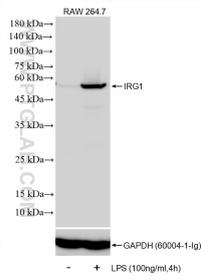
For technical support and original validation data for this product please contact:

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

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

Selected Validation Data



LPS treated RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 86725-1-RR (IRG1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of (4% PFA) fixed LPS treated RAW 264.7 cells using IRG1 antibody (86725-1-RR, Clone: 251531C12) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).