



Rabbit Anti-IRGM antibody

SL4015R

Product Name:	IRGM
Chinese Name:	免疫相关鸟苷三磷酸酶基因抗体
Alias:	Irgm; IFI1; Iigp3; Immunity related GTPase family M protein 1; Immunity related GTPase family, M; Interferon inducible protein 1; IRGM1; LRG 47; LRG47; IRGM HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IRGM:51-150/181
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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 °C.
PubMed:	PubMed
Product Detail:	IRGM belongs to a family of interferon-gamma inducible GTPases, belonging to the GTPase superfamily, and are selectively induced by IFN-gamma or bacterial lipopolysaccharide (LPS) stimulation. IRGM is primarily expressed in all cells derived from B-cell lineages, and is highly expressed in macrophages following IFN-gamma stimulation. IRGM has been shown to be required for host defences against a broad

range of intracellular pathogens. Specifically, IRGM deficient mice show defects with intracellular microbial killing, phagosome maturation and autophagy. More recently IRGM has been shown to inhibit baseline hematopoietic proliferation and is required for a normal hematopoietic stem cell response to chemical and infectious stimuli.

Function:

Putative GTPase which is required for clearance of acute protozoan and bacterial infections. Functions in innate immune response probably through regulation of autophagy. May regulate proinflammatory cytokine production and prevent endotoxemia upon infection. May also play a role in macrophages adhesion and motility.

Subcellular Location:

Golgi apparatus membrane. Cell membrane. Cytoplasmic vesicle, phagosome membrane. Cytoplasmic vesicle, autophagosome membrane. Cell projection, phagocytic cup.

Tissue Specificity:

Widely expressed (at protein level). Expressed in several tissues including colon, small bowel and peripheral blood leukocytes.

DISEASE:

Defects in IRGM are the cause of susceptibility to inflammatory bowel disease type 19 (IBD19) [MIM:612278]. A chronic, relapsing inflammation of the gastrointestinal tract with a complex etiology. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may affect any part of the gastrointestinal tract from the mouth to the anus, but most frequently it involves the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints.

Similarity:

Belongs to the interferon-inducible GTPase family.

SWISS:

A1A4Y4

Gene ID:

345611

Database links:

[Entrez Gene: 345611](#) Human

[Entrez Gene: 15944](#)Mouse

[Entrez Gene: 303090](#)Rat

[SwissProt: A1A4Y4](#)Human

[SwissProt: Q60766](#)Mouse

[SwissProt: Q6AYC2](#)Rat

[Unigene: 519680](#)Human

[Unigene: 652148](#)Human

[Unigene: 20356](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

IRGM(又称Interferon诱导蛋白1)属于 γ -Interferon诱导的GTP酶家族的一种, 是一种复活基因, 目前主要用于克罗恩氏病(一种肠道的自身免疫性疾病)的研究。