干扰素调节因子 1 抗体

产品货号： mIR21318

英文名称： IRF-1

中文名称： 干扰素调节因子 1 抗体

别　　名： interferon regulatory factor 1; IRF 1; IRF1; IRF-1; MAR1; IRF1_HUMAN.

研究领域： 肿瘤　细胞生物　细胞凋亡　转录调节因子　细胞分化

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,

产品应用： WB=1:500-2000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 37kDa

细胞定位： 细胞核 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human IRF-1:41-140/325

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： 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

产品介绍： IRF1 encodes interferon regulatory factor 1, a member of the interferon regulatory transcription factor (IRF) family. IRF1 serves as an activator of interferons alpha and beta transcription, and in mouse it has been shown to be required for double-stranded RNA induction of these genes. IRF1 also functions as a transcription activator of genes induced by interferons alpha, beta, and gamma. Further, IRF1 has been shown to play roles in regulating apoptosis and tumor-suppression.

Function:

Transcriptional regulator which displays a remarkable functional diversity in the regulation of cellular responses. These include the regulation of IFN and IFN-inducible genes, host response to viral and bacterial infections, regulation of many genes expressed during hematopoiesis, inflammation, immune responses and cell proliferation and differentiation, regulation of the cell cycle and induction of growth arrest and programmed cell death following DNA damage. Stimulates both innate and acquired immune responses through the activation of specific target genes and can act as a transcriptional activator and repressor regulating target genes by binding to an interferon-stimulated response element (ISRE) in their promoters. Its target genes for transcriptional activation activity include: genes involved in anti-viral response, such as IFN-alpha/beta, DDX58/RIG-I, TNFSF10/TRAIL, OAS1/2, PIAS1/GBP, EIF2AK2/PKR and RSAD2/viperin; antibacterial response, such as NOS2/INOS; anti-proliferative response, such as p53/TP53, LOX and CDKN1A; apoptosis, such as BBC3/PUMA, CASP1, CASP7 and CASP8; immune response, such as IL7, IL12A/B and IL15, PTGS2/COX2 and CYBB; DNA damage responses and DNA repair, such as POLQ/POLH; MHC class I expression, such as TAP1, PSMB9/LMP2, PSME1/PA28A, PSME2/PA28B and B2M and MHC class II expression, such as CIITA. Represses genes involved in anti-proliferative response, such as BIRC5/survivin, CCNB1, CCNE1, CDK1, CDK2 and CDK4 and in immune response, such as FOXP3, IL4, ANXA2 and TLR4. Stimulates p53/TP53-dependent transcription through enhanced recruitment of EP300 leading to increased acetylation of p53/TP53. Plays an important role in immune response directly affecting NK maturation and activity, macrophage production of IL12, Th1 development and maturation of CD8+ T-cells. Also implicated in the differentiation and maturation of dendritic cells and in the suppression of regulatory T (Treg) cells development. Acts as a tumor suppressor and plays a role not only in antagonism of tumor cell growth but also in stimulating an immune response against tumor cells.

Subunit:

Monomer. Homodimer. Interacts with MYD88 and PIAS3 (By similarity). Interacts with EP300.

Subcellular Location:

Nucleus. Cytoplasm. Note=MYD88-associated IRF1 migrates into the nucleus more efficiently than non-MYD88-associated IRF1.

Post-translational modifications:

Phosphorylated by CK2 and this positively regulates its activity.

Sumoylation represses the transcriptional activity and displays enhanced resistance to protein degradation. Inactivates the tumor suppressor activity. Elevated levels in tumor cells. Major site is Lys-275. Sumoylation is enhanced by PIAS3 (By similarity). Desumoylated by SENP1 in tumor cells and appears to compete with ubiquitination on C-terminal sites.

Ubiquitinated. Appears to compete with sumoylation on C-terminal sites.

DISEASE:

Gastric cancer (GASC) [MIM:613659]: A malignant disease which starts in the stomach, can spread to the esophagus or the small intestine, and can extend through the stomach wall to nearby lymph nodes and organs. It also can metastasize to other parts of the body. The term gastric cancer or gastric carcinoma refers to adenocarcinoma of the stomach that accounts for most of all gastric malignant tumors. Two main histologic types are recognized, diffuse type and intestinal type carcinomas. Diffuse tumors are poorly differentiated infiltrating lesions, resulting in thickening of the stomach. In contrast, intestinal tumors are usually exophytic, often ulcerating, and associated with intestinal metaplasia of the stomach, most often observed in sporadic disease. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the IRF family.

Contains 1 IRF tryptophan pentad repeat DNA-binding domain.

SWISS:

P10914

Gene ID:

3659

Important Note:

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

转录调节因子（Transcriptin Regulators）

干扰素调节因子(IRF-1)可刺激 IFN-gamma 的生成，IRF-1 是 T 细胞和 B 细胞分化和成熟的重要调节因子。

干扰素调节因子家族是一大类对干扰素起调控作用的转录因子的统称。 一般认为干扰素调节因子(IRF)通过调节干扰素的表达而行使其抗病毒、应激、免疫调节功能。近年来，研究人员发现 IRF 在细胞凋亡、细胞周期、细胞分化、肿瘤发生中也起着重要的调节作用。

产品图片