# abcam

## Product datasheet

## Anti-IRF1 antibody [BLR039F] - BSA free ab272088

Recombinant

## 5 Images

#### Overview

**Product name** Anti-IRF1 antibody [BLR039F] - BSA free

**Description** Rabbit monoclonal [BLR039F] to IRF1 - BSA free

Host species Rabbit

Tested applications Suitable for: WB, ICC, IHC-P, IP

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide within Human IRF1 aa 250-300. The exact sequence is proprietary.

NP\_002189.1 and Gene ID 3659.

Database link: P10914

Positive control IP: Jurkat whole cell lysate. WB: Jurkat, HepG2, HeLa (+ IFN-gamma), HeLa, Sr, MOLT4, RPMI

8226, KG1, A549 and MCF7 whole cell lysate. ICC: OVCAR-8 cells. IHC-P: Human ovarian

cancer tissue.

**General notes** ab272088 is the BSA-free version of <u>ab243895</u>.

This product is sold under License from Bethyl Laboratories, Inc.

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 8.20

Preservative: 0.09% Sodium azide
Constituent: 98% Borate buffered saline

**Purification notes** Recombinant antibody was purified from cell culture supernatant.

ClonalityMonoclonalClone numberBLR039F

**Isotype** IgG

## **Applications**

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## The Abpromise guarantee

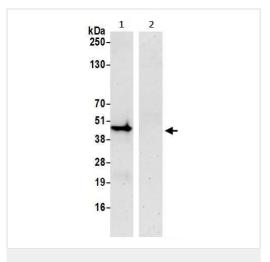
Our <u>Abpromise guarantee</u> covers the use of ab272088 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

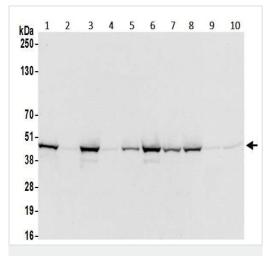
Application	Abreviews	Notes
WB		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.

Target	
Function	Specifically binds to the upstream regulatory region of type I IFN and IFN-inducible MHC class I genes (the interferon consensus sequence (ICS)) and activates those genes. Acts as a tumor suppressor.
Involvement in disease	Defects in IRF1 are a cause of gastric cancer (GASC) [MIM:613659]; also called gastric cancer intestinal or stomach cancer. Gastric cancer is 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.
Sequence similarities	Belongs to the IRF family.  Contains 1 IRF tryptophan pentad repeat DNA-binding domain.
Post-translational modifications	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.
Cellular localization	Nucleus.

## Images



Immunoprecipitation - Anti-IRF1 antibody [BLR039F] - BSA free (ab272088)



Western blot - Anti-IRF1 antibody [BLR039F] - BSA free (ab272088)

IRF1 was immunoprecipitated from 1.0 mg Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate with **ab243895** at 20 µl per reaction. Western blot was performed on the immunoprecipitate using **ab243895** at 1/1000 dilution.

Lane 1: ab243895 IP in Jurkat whole cell lysate.

Lane 2: Control IgG in Jurkat whole cell lysate.

Detection: Chemiluminescence with an exposure time of 30 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (ab243895).

Western blot analysis using ab243895 at 1/1000 dilution.

Lane 1: Jurkat whole cell lysate (50 µg).

Lane 2: HepG2 whole cell lysate (50 µg).

Lane 3: HeLA (+ IFN-gamma) whole cell lysate (50 µg).

Lane 4: HeLa whole cell lysate (50 µg).

Lane 5: SR whole cell lysate (50 µg).

Lane 6: MOLT-4 whole cell lysate (50 µg).

Lane 7: RPMI 8226 whole cell lysate (50 µg).

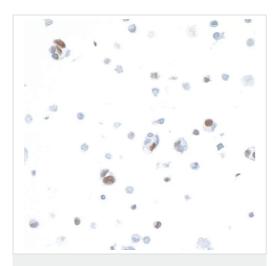
Lane 8: KG-1 whole cell lysate (50 µg).

Lane 9: A549 whole cell lysate (50 µg).

Lane 10: MCF7 whole cell lysate (50 µg).

A HRP-conjugated goat anti-rabbit lgG antibody was used as the secondary. Detection: chemiluminescence with an exposure time of 3 seconds.

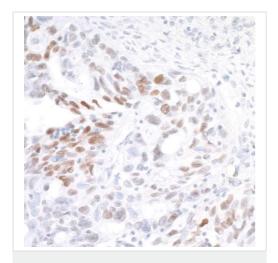
This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (ab243895).



Immunocytochemistry - Anti-IRF1 antibody [BLR039F] - BSA free (ab272088)

Formalin-fixed, paraffin-embedded OVCAR-8 cells labeling IRF1 using <u>ab243895</u> at 1/250 dilution in ICC analysis. A HRP-conjugated goat-anti rabbit IgG was used as the secondary. DAB staining.

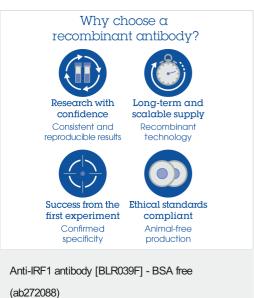
This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (ab243895).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IRF1 antibody [BLR039F] - BSA free (ab272088)

Formalin-fixed, paraffin-embedded human ovarian carcinoma tissue stained for IRF1 using <u>ab243895</u> at 1/250 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit antibody was used as the secondary. DAB staining.

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (<u>ab243895</u>).



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