# abcam

# Product datasheet

# Anti-IRF3 (phospho S386) antibody [EPR2346] - BSA and Azide free ab182859



# 8 References 2 Images

#### Overview

Product name Anti-IRF3 (phospho S386) antibody [EPR2346] - BSA and Azide free

Description Rabbit monoclonal [EPR2346] to IRF3 (phospho S386) - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, Dot blot

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control MCF-7 cells treated with Calyculin A.

**General notes** ab182859 is the carrier-free version of <u>ab76493</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

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## **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: 100% PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR2346

**Isotype** IgG

# **Applications**

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab182859 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. Predicted molecular weight: 47 kDa.
Dot blot		Use at an assay dependent concentration.

## **Target**

**Function** 

Mediates interferon-stimulated response element (ISRE) promoter activation. Functions as a molecular switch for antiviral activity. DsRNA generated during the course of an viral infection leads to IRF3 phosphorylation on the C-terminal serine/threonine cluster. This induces a conformational change, leading to its dimerization, nuclear localization and association with CREB binding protein (CREBBP) to form dsRNA-activated factor 1 (DRAF1), a complex which activates the transcription of genes under the control of ISRE. The complex binds to the IE and PRDIII regions on the IFN-alpha and IFN-beta promoters respectively. IRF-3 does not have any transcription activation domains.

Tissue specificity

Expressed constitutively in a variety of tissues.

Sequence similarities

Belongs to the IRF family.

Contains 1 IRF tryptophan pentad repeat DNA-binding domain.

Post-translational modifications

Constitutively phosphorylated on many serines residues. C-terminal serine/threonine cluster is phosphorylated in response of induction by IKBKE and TBK1. Ser-385 and Ser-386 may be specifically phosphorylated in response to induction. An alternate model propose that the five serine/threonine residues between 396 and 405 are phosphorylated in response to a viral infection. Phosphorylation, and subsequent activation of IRF3 is inhibited by vaccinia virus protein

E3.

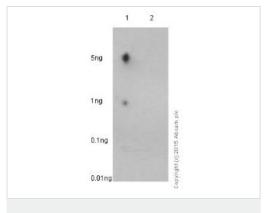
Ubiquitinated; ubiquitination involves RBCK1 leading to proteasomal degradation. Polyubiquitinated; ubiquitination involves TRIM21 leading to proteasomal degradation. ISGylated by HERC5 resulting in sustained IRF3 activation and in the inhibition of IRF3

ubiquitination by disrupting PIN1 binding. The phosphorylation state of IRF3 does not alter ISGylation.

#### **Cellular localization**

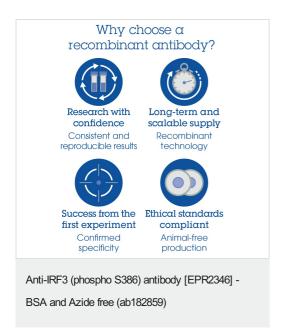
Cytoplasm. Nucleus. Shuttles between cytoplasmic and nuclear compartments, with export being the prevailing effect. When activated, IRF3 interaction with CREBBP prevents its export to the cytoplasm.

## **Images**



Dot Blot - Anti-IRF3 (phospho S386) antibody [EPR2346] - BSA and Azide free (ab182859) This Dot Blot data was generated using the same anti-phospho IRF3 S386 antibody clone, EPR2346, in a different buffer formulation (cat# <u>ab76493</u>).

Dot blot analysis of IRF3 single phospho peptide pS386 (lane 1) and IRF3 non-phospho peptide (lane 2) with <u>ab76493</u> at 1/1000. Blocking and diluting buffer was 5% NFDM/TBST. The secondary antibody used was <u>ab97051</u> Peroxidase conjugated Goat Anti-Rabbit IgG, (H+L) at 1/100,000.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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