

## Product datasheet

# Anti-IRF3 (phospho S386) antibody [EPR2346] ab76493

Recombinant RabMAb

★★★★☆ **2 Abreviews** **140 References** [4 Images](#)

### Overview

<b>Product name</b>	Anti-IRF3 (phospho S386) antibody [EPR2346]
<b>Description</b>	Rabbit monoclonal [EPR2346] to IRF3 (phospho S386)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, Dot blot
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human IRF3 (phospho S386). Database link: <a href="#">Q14653</a>
<b>Positive control</b>	WB: MCF7 cells treated with Calyculin A.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                   EPR2346

Isotype                            IgG

## Applications

**The Abpromise guarantee**           Our **Abpromise guarantee** covers the use of ab76493 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	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 47 kDa.
Dot blot		1/1000.

## 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.

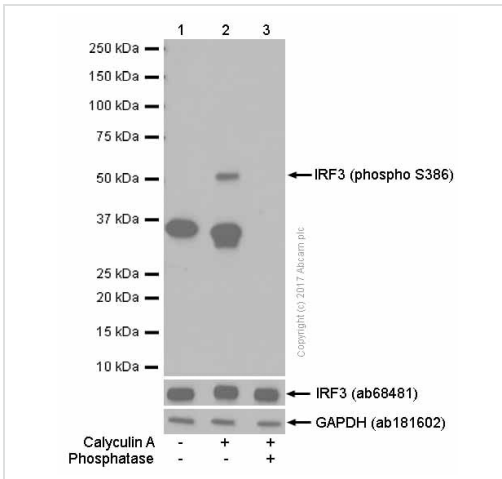
**Sequence similarities**                    Belongs to the IRF family.  
Contains 1 IRF tryptophan pentad repeat DNA-binding domain.

**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



Western blot - Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493)

**All lanes :** Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493) at 0.2 µg/ml (purified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** MCF7 (Human breast adenocarcinoma epithelial cell) treated with calyculin A for 45 minutes whole cell lysates

**Lane 3 :** MCF7 (Human breast adenocarcinoma epithelial cell) treated with calyculin A for 45 minutes whole cell lysates. Then the membrane was incubated with phosphatase

Lysates/proteins at 15 µg per lane.

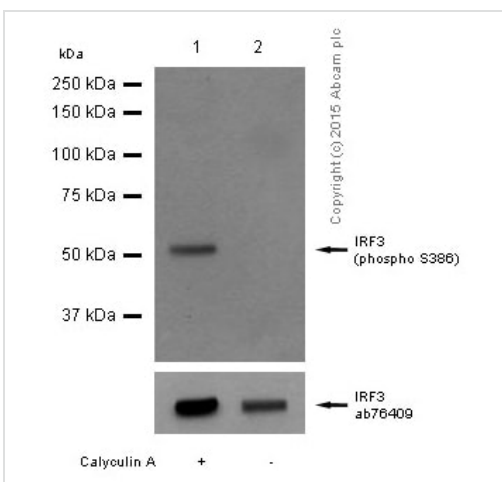
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 47 kDa

Blocking and diluting buffer: 5% NFDm/TBST

We are unsure to define the extra band at 37KD.



Western blot - Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493)

**All lanes :** Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493) at 1/20000 dilution (Unpurified)

**Lane 1 :** MCF7 cell lysate - treated with Calyculin A

**Lane 2 :** MCF7 cell lysate – untreated

Lysates/proteins at 20 µg per lane.

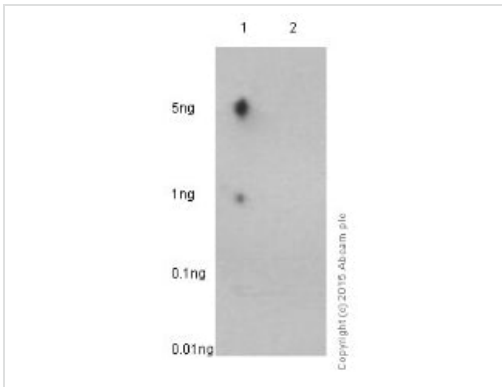
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 47 kDa

Blocking buffer - 5% NFDm/TBST





Diluting buffer - 1% BSA



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

Dot Blot - Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-IRF3 (phospho S386) antibody [EPR2346] (ab76493)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors