

Product datasheet

Anti-ISG15 antibody [EPR3446] ab133346

KO VALIDATED Recombinant RabMAB

[6 References](#) [4 Images](#)

Overview

Product name	Anti-ISG15 antibody [EPR3446]
Description	Rabbit monoclonal [EPR3446] to ISG15
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Daudi whole cell lysate (ab3951), IFN treated wild type HAP1 cell lysate, HeLa (untreated) and HeLa treated with 10 ng/ml IFN- a1 for 16 hours whole cell lysates ICC/IF: HeLa cells
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</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

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant

Clonality	Monoclonal
Clone number	EPR3446
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133346 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		1/1000 - 1/10000. Detects a band of approximately 15 kDa (predicted molecular weight: 18 kDa).
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

Target

Function Ubiquitin-like protein that is conjugated to intracellular target proteins after IFN-alpha or IFN-beta stimulation. Its enzymatic pathway is partially distinct from that of ubiquitin, differing in substrate specificity and interaction with ligating enzymes. ISG15 conjugation pathway uses a dedicated E1 enzyme, but seems to converge with the Ub conjugation pathway at the level of a specific E2 enzyme. Targets include STAT1, SERPINA3G/SPI2A, JAK1, MAPK3/ERK1, PLCG1, EIF2AK2/PKR, MX1/MxA, and RIG-1. Deconjugated by USP18/UBP43. Shows specific chemotactic activity towards neutrophils and activates them to induce release of eosinophil chemotactic factors. May serve as a trans-acting binding factor directing the association of ligated target proteins to intermediate filaments. May also be involved in autocrine, paracrine and endocrine mechanisms, as in cell-to-cell signaling, possibly partly by inducing IFN-gamma secretion by monocytes and macrophages. Seems to display antiviral activity during viral infections.

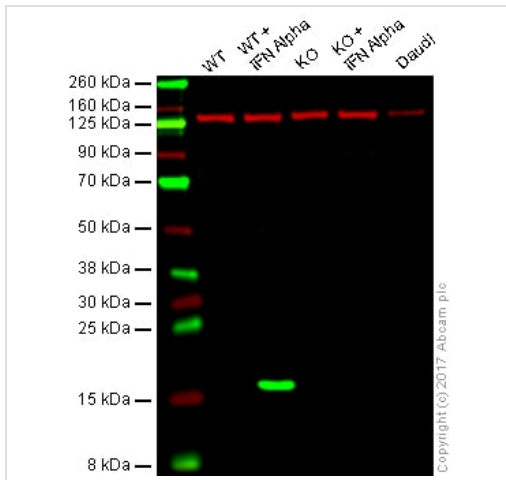
In response to IFN-tau secreted by the conceptus, may ligate to and regulate proteins involved in the release of prostaglandin F2-alpha (PGF), and thus prevent lysis of the corpus luteum and maintain the pregnancy.

Tissue specificity Detected in lymphoid cells, striated and smooth muscle, several epithelia and neurons.

Sequence similarities Contains 2 ubiquitin-like domains.

Cellular localization Cytoplasm. Secreted. UCRP conjugates seem to be noncovalently associated with the intermediate filaments and distributed in a punctate pattern. Also secreted.

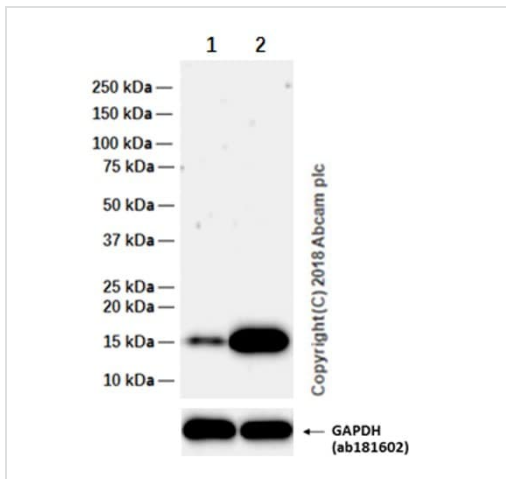
Images



Western blot - Anti-ISG15 antibody [EPR3446] (ab133346)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)
Lane 2: ISG15 IFN treated wild type HAP1 whole cell lysate (20 µg)
Lane 3: ISG15 (KO) whole cell lysate (20 µg)
Lane 4: ISG15 (KO) IFN alpha treated whole cell lysate (20 µg)
Lane 5: Daudi whole cell lysate (20 µg)
Lanes 1 - 5: Merged signal (red and green). Green - ab133346 observed at 18 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab133346 was shown to specifically react with ISG15 in IFN alpha 1 induced wild-type HAP1 cells. Loss of signal was observed when knockout cell line was used. Wild-type and HAP1 IFN treated knockout samples were subjected to SDS-PAGE. Ab133346 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1000 dilution and 1/30000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ISG15 antibody [EPR3446] (ab133346)

All lanes : Anti-ISG15 antibody [EPR3446] (ab133346) at 1/2000 dilution

Lane 1 : Untreated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) treated with 10 ng/ml IFN- α1 for 16 hours whole cell lysate

Lysates/proteins at 20 µg per lane.

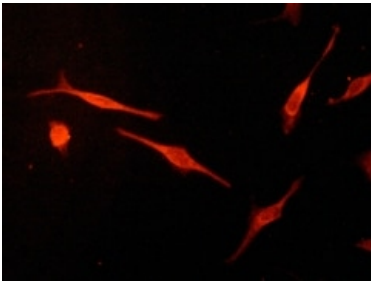
Secondary

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

Predicted band size: 18 kDa
Observed band size: 17 kDa

Exposure time: 3 minutes

Blocking/Diluting buffer and concentration: 5% NFD/MTBST



Immunofluorescent analysis of ISG15 in HeLa cells stained with ab133346 at a 1/100 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-ISG15 antibody [EPR3446] (ab133346)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-ISG15 antibody [EPR3446] (ab133346)

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

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