

Product datasheet

Anti-IRF2 antibody [EPR4644(2)] ab124744

KO VALIDATED Recombinant RabMAB

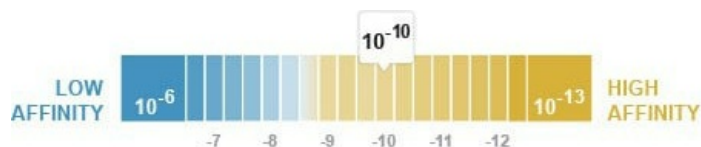
★★★★☆ [1 Abreviews](#) [12 References](#) [11 Images](#)

Overview

Product name	Anti-IRF2 antibody [EPR4644(2)]
Description	Rabbit monoclonal [EPR4644(2)] to IRF2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: SW480, HeLa, Jurkat, Caco-2, RAW264.7 and NIH/3T3 cell lysates, and Human fetal lung lysate. IHC-P: Human colon, Human cervical cancer, Mouse colon and human colonic carcinoma tissue. 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>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

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. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 4.04 x 10 ⁻¹⁰ M



[Learn more about K_D](#)

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4644(2)
Isotype	IgG

Applications

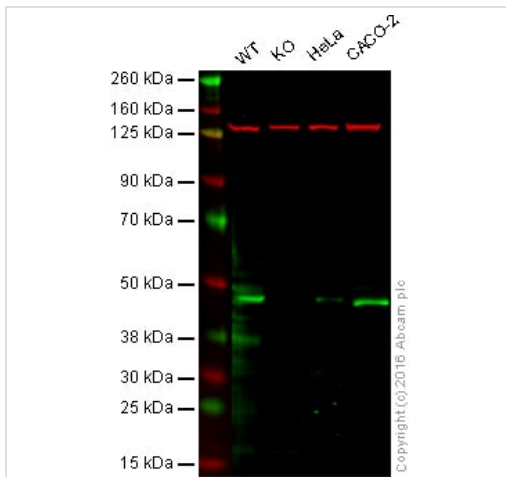
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124744 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 50 kDa (predicted molecular weight: 39 kDa).
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
ICC/IF		1/500.

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 represses those genes. Also acts as an activator for several genes including H4 and IL7. Constitutively binds to the ISRE promoter to activate IL7. Involved in cell cycle regulation through binding the site II (HiNF-M) promoter region of H4 and activating transcription during cell growth. Antagonizes IRF1 transcriptional activation.
Tissue specificity	Expressed throughout the epithelium of the colon. Also expressed in lamina propria.
Sequence similarities	Belongs to the IRF family. Contains 1 IRF tryptophan pentad repeat DNA-binding domain.
Post-translational modifications	Acetylated by CBP/ p300 during cell-growth. Acetylation on Lys-75 is required for stimulation of H4 promoter activity. The major sites of sumoylation are Lys-137 and Lys-293. Sumoylation by SUMO1 increases its transcriptional repressor activity on IRF1 and diminishes its ability to activate ISRE and H4 promoter.
Cellular localization	Nucleus.

Images



Western blot - Anti-IRF2 antibody [EPR4644(2)]
(ab124744)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

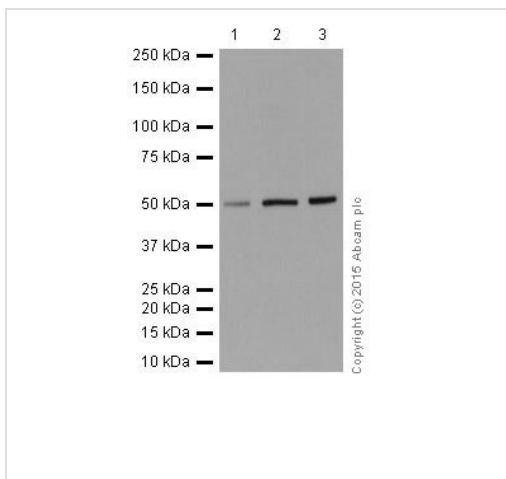
Lane 2: IRF2 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: CACO2 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab124744 observed at 48 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab124744 was shown to recognize IRF2 when IRF2 knockout samples were used, along with additional cross-reactive bands. Wild-type and IRF2 knockout samples were subjected to SDS-PAGE. Ab124744 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/1000 and 1/10000 dilutions respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) **ab216773** and 680CW Goat anti Mouse secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-IRF2 antibody [EPR4644(2)]
(ab124744)

All lanes : Anti-IRF2 antibody [EPR4644(2)] (ab124744) at 1/5000 dilution

Lane 1 : SW480 (Human colorectal adenocarcinoma cell line)

Lane 2 : HeLa (Human epithelial cells from cervix adenocarcinoma)

Lane 3 : Jurkat (Human T cell leukemia cells from peripheral blood)

Lysates/proteins at 20 µg per lane.

Secondary

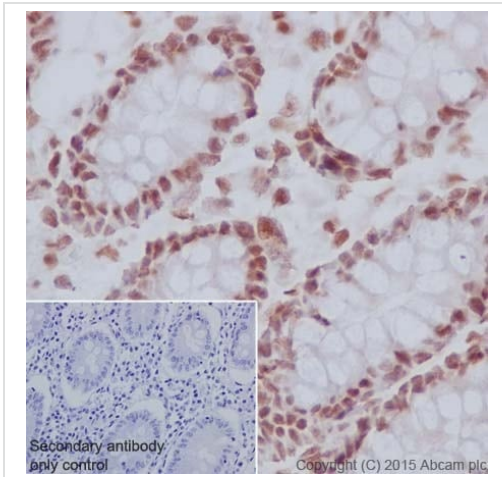
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 50 kDa

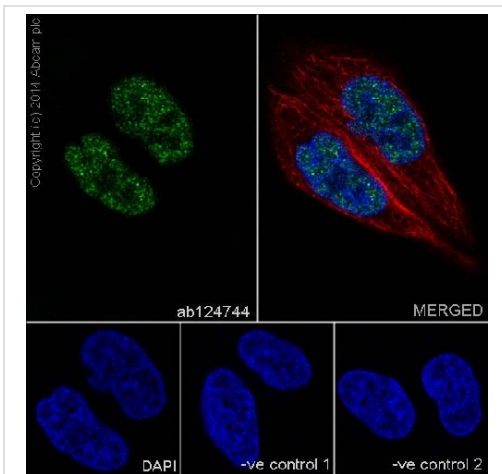
Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon tissue labeling IRF2 with purified ab124744 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution was used as the secondary antibody. Nucleus staining on epithelium of human colon was observed. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

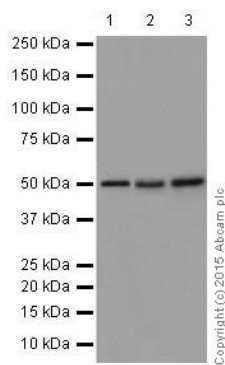
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling IRF2 with ab124744 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green). Confocal image showing nuclear staining on HeLa cells.

The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab124744 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Western blot - Anti-IRF2 antibody [EPR4644(2)]
(ab124744)

All lanes : Anti-IRF2 antibody [EPR4644(2)] (ab124744) at 1/1000 dilution

Lane 1 : Caco-2 (Human colorectal adenocarcinoma cells)

Lane 2 : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus)

Lane 3 : NIH/3T3 (Mouse embryo fibroblast cells)

Lysates/proteins at 10 µg per lane.

Secondary

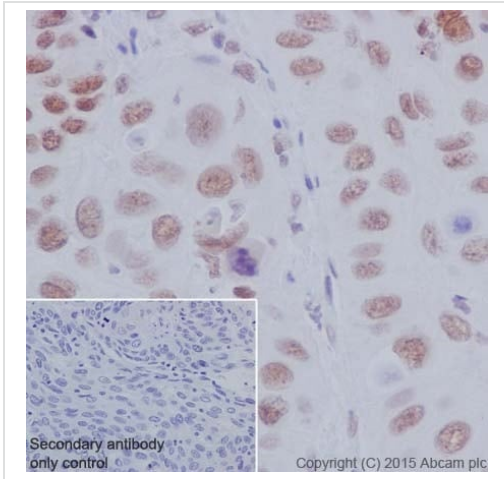
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 50 kDa

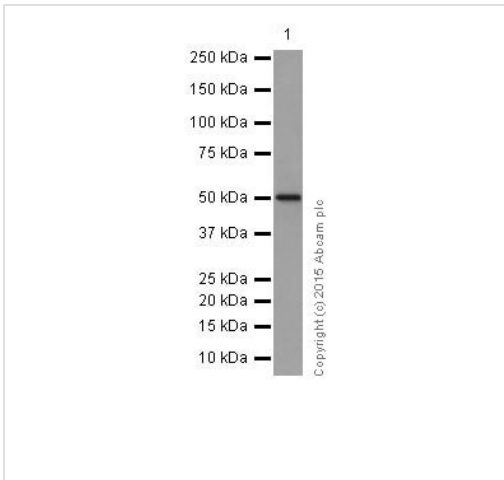
Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cervical cancer tissue labeling IRF2 with purified ab124744 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution was used as the secondary antibody. Nucleus staining on tumor cells of human cervix cancer was observed. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.



Western blot - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Anti-IRF2 antibody [EPR4644(2)] (ab124744) at 1/1000 dilution + Human fetal lung lysate at 10 µg

Secondary

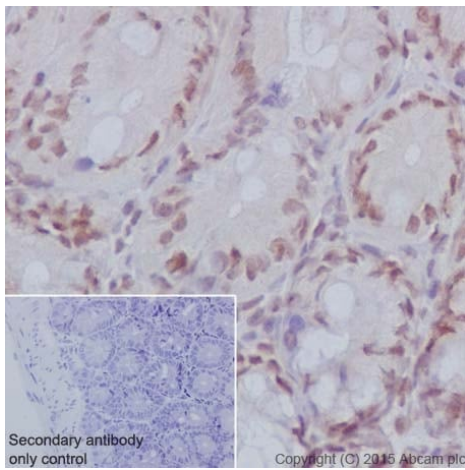
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 50 kDa

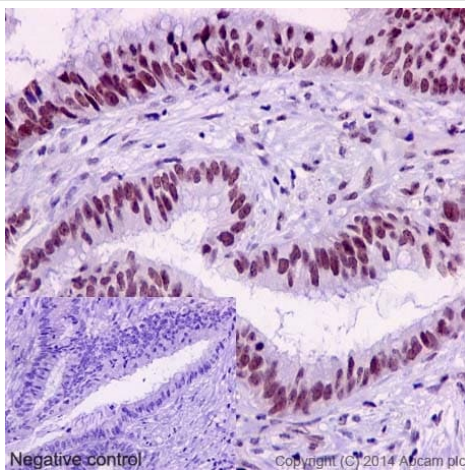
Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDM/TBST



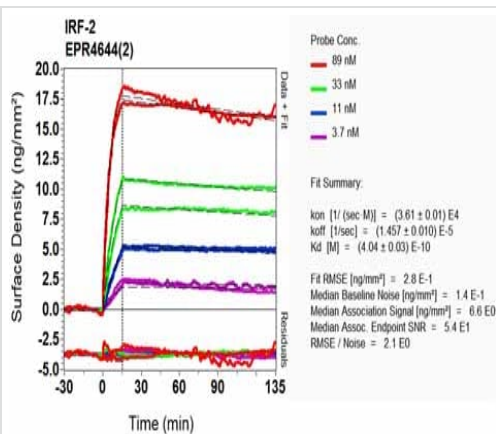
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse colon tissue labeling IRF2 with purified ab124744 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution was used as the secondary antibody. Nucleus staining on epithelial cells of mouse colon was observed. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colonic carcinoma tissue labelling IRF2 with purified ab124744 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.



OxLD Scanning - Anti-IRF2 antibody [EPR4644(2)] (ab124744)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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-IRF2 antibody [EPR4644(2)] (ab124744)

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

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