

Product datasheet

Anti-IRF3 antibody [5D2] ab124399

[16 Images](#)

Overview

Product name	Anti-IRF3 antibody [5D2]
Description	Mouse monoclonal [5D2] to IRF3
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human, Monkey
Immunogen	Recombinant Human IRF3 protein expressed in 293T cells.
Positive control	IRF3-transfected HEK293T cell lysate; HeLa, HT29, COS7 and MCF7 cell extracts; Human breast, breast adenocarcinoma, colon adenocarcinoma, kidney carcinoma, lung, Ovary, ovary adenocarcinoma, pancreas, pancreas carcinoma, thyroid, thyroid carcinoma, endometrium, prostate carcinoma and bladder carcinoma tissues
General notes	Dilute in PBS (pH7.3) before use.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
Purity	Protein A purified
Purification notes	ab124399 is purified from Mouse ascites fluid by affinity chromatography.
Clonality	Monoclonal
Clone number	5D2
Isotype	IgG2b

Applications

Our [Abpromise guarantee](#) covers the use of **ab124399** in the following tested applications.

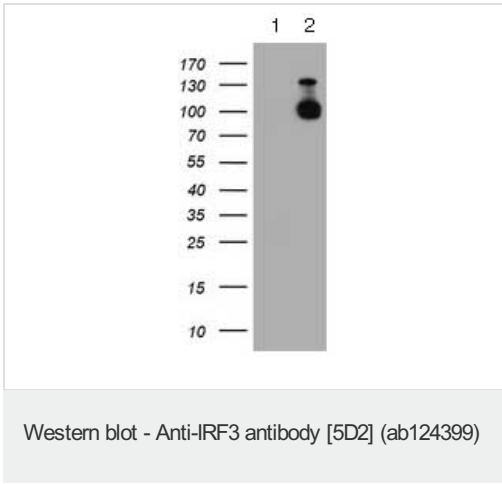
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Predicted molecular weight: 47 kDa.
IHC-P		1/50.

Target

Function	Mediates interferon-stimulated response element (ISRE) promoter activation. Functions as a molecular switch for antiviral activity. DsRNA generated during the course of a 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



All lanes : Anti-IRF3 antibody [5D2]
(ab124399) at 1/2000 dilution

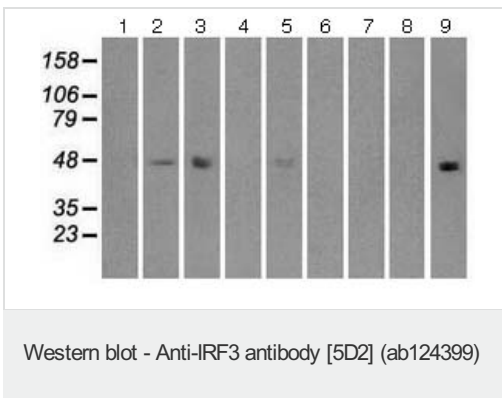
Lane 1 : HEK293T cell lysate transfected with pCMV6-ENTRY control

Lane 2 : HEK293T cell lysate transfected with pCMV6-ENTRY IRF3

Lysates/proteins at 5 µg per lane.

Predicted band size: 47 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC209951)



All lanes : Anti-IRF3 antibody [5D2]
(ab124399) at 1/2000 dilution

Lane 1 : HepG2 cell extract

Lane 2 : HeLa cell extract

Lane 3 : HT29 cell extract

Lane 4 : A549 cell extract

Lane 5 : COS7 cell extract

Lane 6 : Jurkat cell extract

Lane 7 : MDCK cell extract

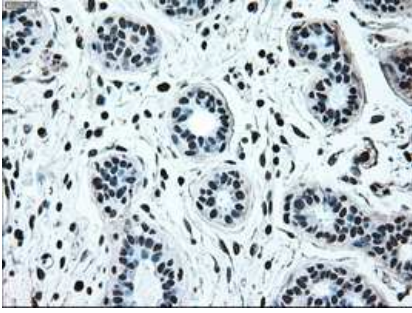
Lane 8 : PC12 cell extract

Lane 9 : MCF7 cell extract

Lysates/proteins at 35 µg per lane.

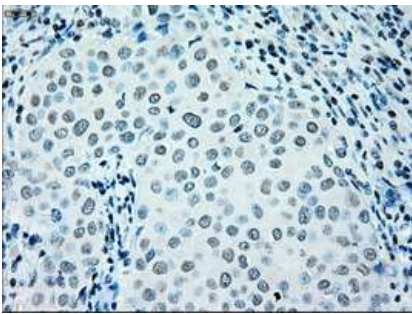
Predicted band size: 47 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC209951)



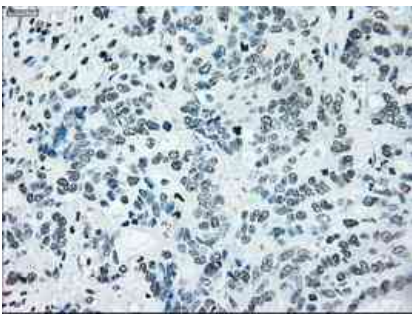
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human breast tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



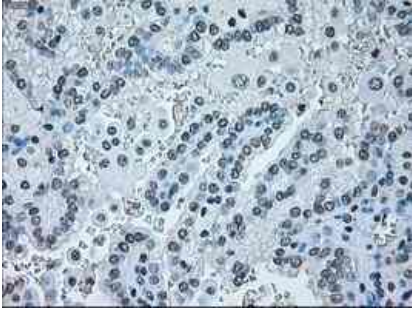
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human breast adenocarcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



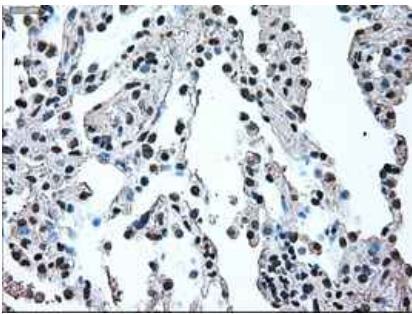
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human colon adenocarcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



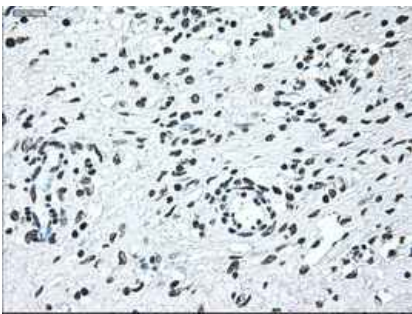
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human kidney carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



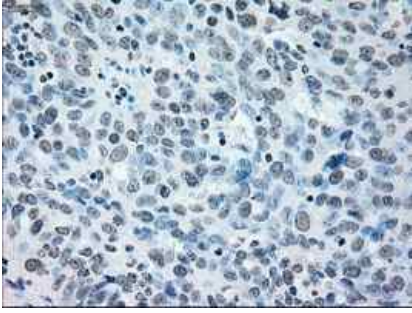
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human lung tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



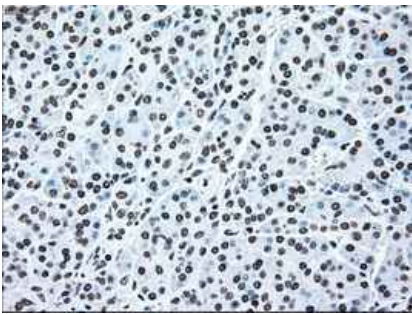
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human ovary tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human ovary adenocarcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



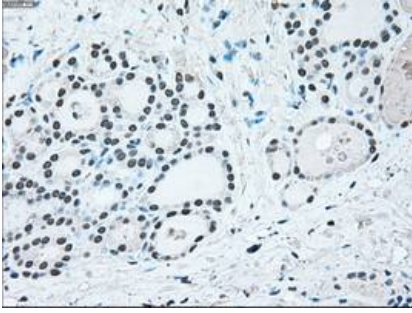
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human pancreas tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



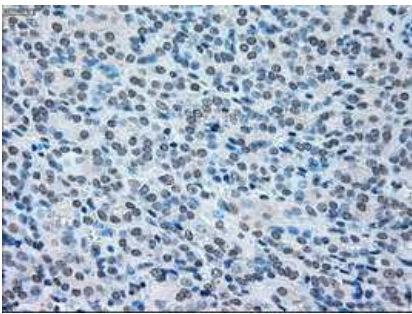
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human pancreas carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



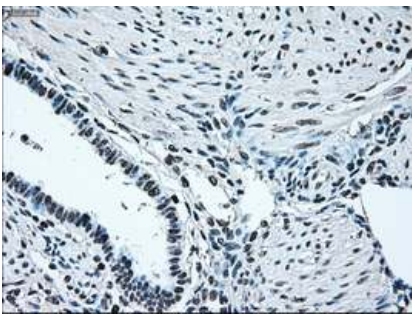
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human thyroid tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



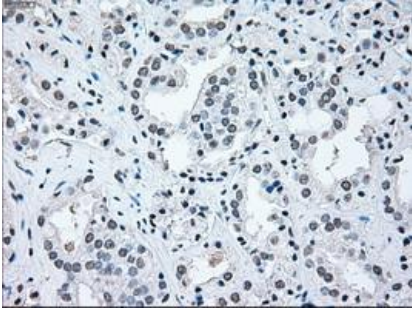
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human thyroid carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



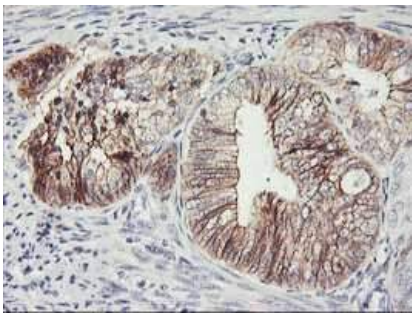
ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human endometrium tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human prostate carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)



ab124399 at 1/50 dilution staining IRF3 in Paraffin-embedded Human bladder carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF3 antibody [5D2] (ab124399)

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