abcam

Product datasheet

Anti-Nrf2 (phospho S40) antibody [EP1809Y] ab76026

重组 RabMAb

18 Abreviews 180 References 17 图像

概述

产品名称	Anti-Nrf2 (phospho S40)抗体[EP1809Y]
描述	兔单克隆抗体[EP1809Y] to Nrf2 (phospho S40)
宿主	Rabbit
经测试应用	**适用于:** Dot blot, ICC/IF, IHC-P, Flow Cyt (Intra), WB **不适用于:** IP
种属反应性	**与反应:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as **ab133404**)
阳性对照	WB: HepG2 whole cell lysate (**ab7900**). IHC-P: Human tonsil, breast carcinoma, ovarian carcinoma and cervical carcinoma tissue. ICC/IF: HepG2 cells. Flow Cyt (intra): Jurkat cells.
常规说明	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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified

克隆	单克隆
克隆编号	EP1809Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab76026于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Dot blot		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	1/100 - 1/250.
IHC-P	★★★★☆ (3)	1/100 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
Flow Cyt (Intra)		1/80 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (13)	1/5000 - 1/50000. Predicted molecular weight: 68 kDa.

应用说明 Is unsuitable for IP.

靶标

功能 Transcription activator that binds to antioxidant response (ARE) elements in the promoter regions of target genes. Important for the coordinated up-regulation of genes in response to oxidative stress. May be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region.

组织特异性 Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in fetal muscle.

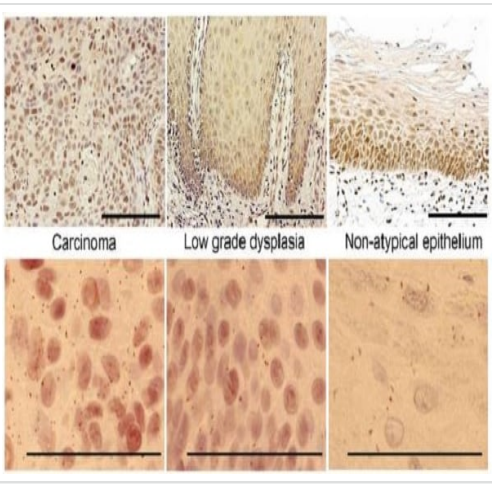
序列相似性 Belongs to the bZIP family. CNC subfamily.
Contains 1 bZIP domain.

结构域 Acidic activation domain in the N-terminus, and DNA binding domain in the C-terminus.

翻译后修饰 Phosphorylation of Ser-40 by PKC in response to oxidative stress dissociates NFE2L2 from its cytoplasmic inhibitor KEAP1, promoting its translocation into the nucleus.

细胞定位 Cytoplasm > cytosol. Nucleus. Cytosolic under unstressed conditions, translocates into the nucleus upon induction by electrophilic agents.

图片



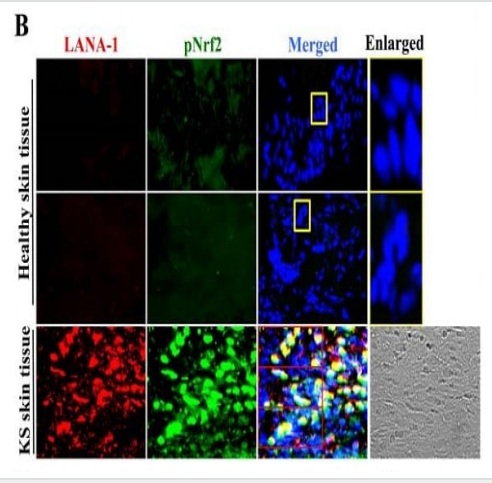
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Nrf2 was abundantly expressed in carcinomas, low grade dysplasias, and non-atypical epithelia of oral tissue.

Representative findings of Nrf2 staining in carcinoma (left), in low grade dysplasia (middle), and in non-atypical epithelium (right).

Corresponding PLA signals are displayed in the lower row. Scale bar; 100 µm.

Surgical specimens were transferred to 10% buffered formalin and fixed overnight. The fixed samples were embedded in paraffin, and serially sliced into 5 µm sections. After dewaxing, sections were autoclaved at 120°C for 1 min in 10 mM sodium citrate buffer (pH 6.0), and immersed in 0.3% H_2O_2. They were then incubated overnight at 4°C with primary antibody to Nrf2 (diluted 1:200). The sections were rinsed with 1×PBS and incubated with the secondary antibody conjugated with horseradish peroxidase at room temperature for 1 hour. The sections were then stained with 3.3′-diaminobenzidinetetrahydrochloride (DAB) and counterstained with hematoxylin.

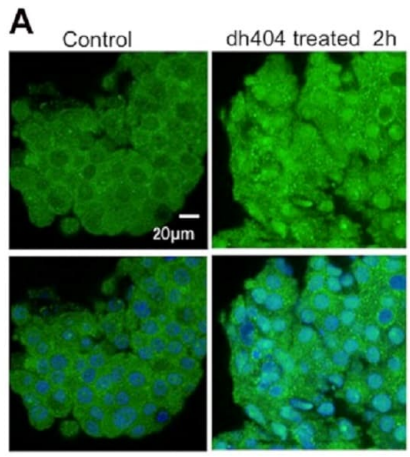


Immunocytochemistry/ Immunofluorescence - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Immunofluorescence analysis of Nrf2 levels in Kaposi's sarcoma skin lesions.

B) Healthy skin (top two rows) and KS skin tissue (bottom row) were double-stained for LANA-1 (Alexa-Fluor 594- red) and host phosphorylated pNrf2 (ab76026) (Alexa-Fluor®488 – green). DAPI was used to visualize the nuclei, and the triple merge of LANA-1, pNrf2 and DAPI is shown in the third column.

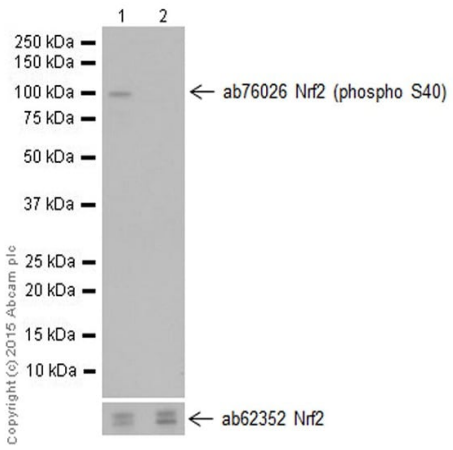
Yellow square=enlarged area.



Immunocytochemistry/ Immunofluorescence - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Nrf2 Translocation from cytoplasm to nucleus.

(A) Human islets were treated with dh404 for 0.5, 1 or 2 hours. The treated and untreated samples were stained with Nrf2 antibody ab76026 (Green) and DAPI (Blue). The con-focal microscope clearly showed that the Nrf2 translocation from cytoplasm to nucleus in the dh404 treated human islet cells



Western blot - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

All lanes : Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026) at 1/50000 dilution (purified)

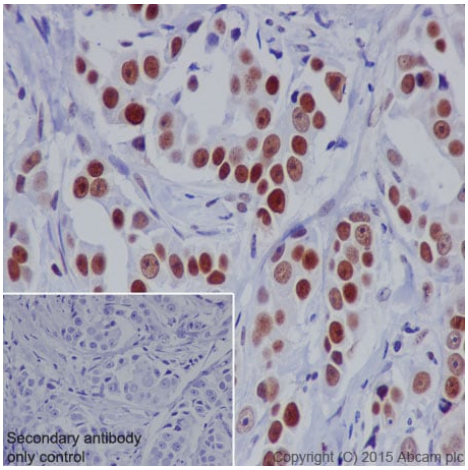
Lane 1 : untreated HepG2 cell lysate
Lane 2 : HepG2 treated with phosphatase lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP goat anti-rabbit IgG (H+L) at 1/20000 dilution

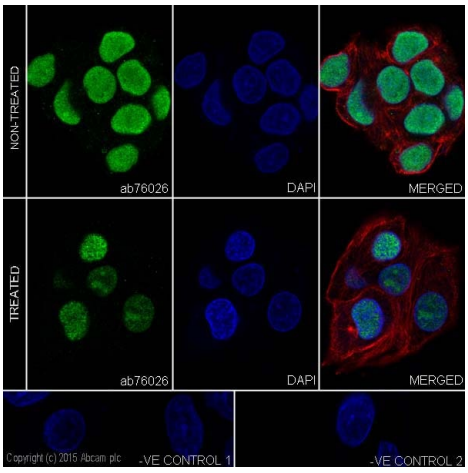
Predicted band size: 68 kDa
Observed band size: 90 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



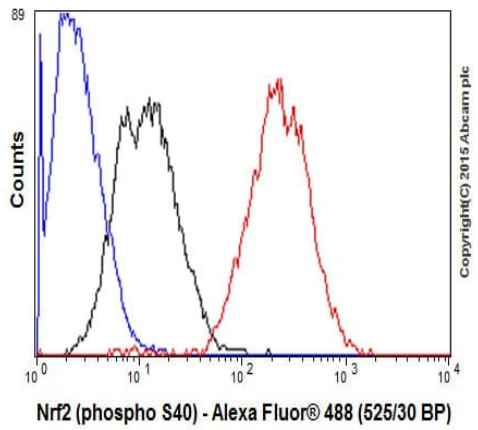
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Immunohistochemical staining of paraffin embedded human breast carcinoma with purified ab76026 at a working dilution of 1/500. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



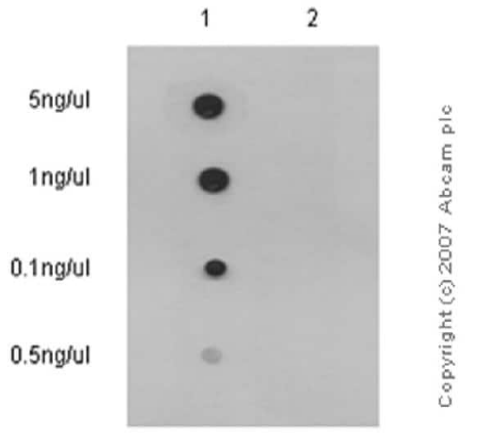
Immunocytochemistry/ Immunofluorescence - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Immunofluorescence staining of HepG2 cells with purified ab76026 at a working dilution of 1/100, counter-stained with DAPI. The treated cells were treated with alkaline phosphatase for 1 h at 37°C. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab76026 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



Flow Cytometry (Intracellular) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Overlay histogram showing Jurkat cells fixed in 4% PFA and stained with purified ab76026 at a dilution of 1 in 80 (red line). The secondary antibody used was FITC goat anti-rabbit at a dilution of 1 in 500. Rabbit monoclonal IgG was used as an isotype control (black line) and cells incubated in the absence of both primary and secondary antibody were used as a negative control (blue line).

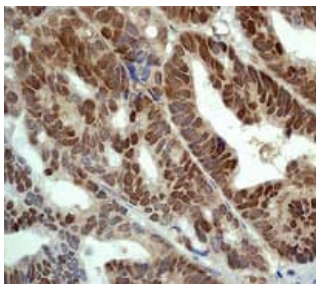


Dot Blot - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Dot blot analysis of Nrf2 peptides using unpurified ab76026 at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated secondary antibody at 1/1000 dilution. Blocking and diluting buffer was 5% NFDM/TBST.

Lane 1: Nrf2 (pS40) phospho peptide

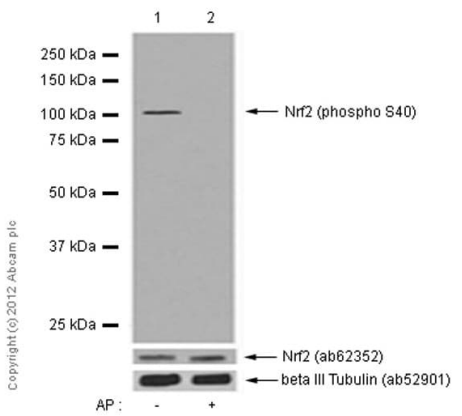
Lane 2: Nrf2 non-phospho peptide



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma using unpurified ab76026 at 1/100 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

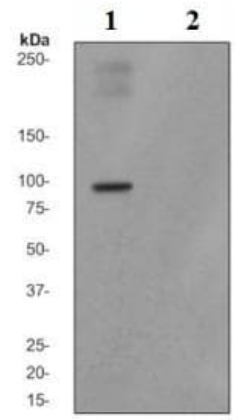
All lanes : Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026) at 1/10000 dilution (unpurified)

Lane 1 : Untreated HepG2 (human hepatocellular carcinoma) whole cell lysates 20µg
Lane 2 : HepG2 (human hepatocellular carcinoma) treated with Alkaline Phosphatase (AP) whole cell lysates 20µg.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/1000 dilution

Predicted band size: 68 kDa
Observed band size: 100 kDa

Blocking buffer: 5% NFDM/TBST, dilution buffer: 5% NFDM /TBST, exposure time: 15 seconds



Western blot - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

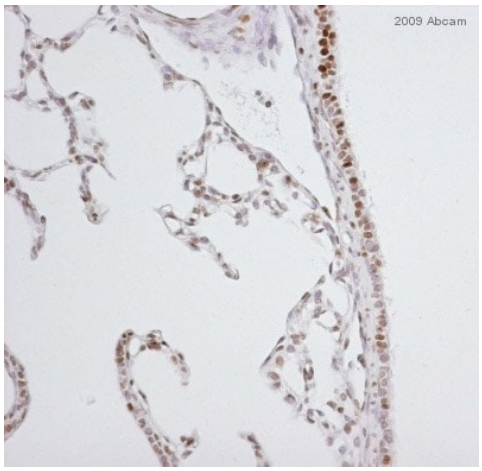
All lanes : Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026) at 1/20000 dilution (unpurified)

Lane 1 : HepG2 cell lysate
Lane 2 : HepG2 cell lysate treated with AP

Lysates/proteins at 10 µg per lane.

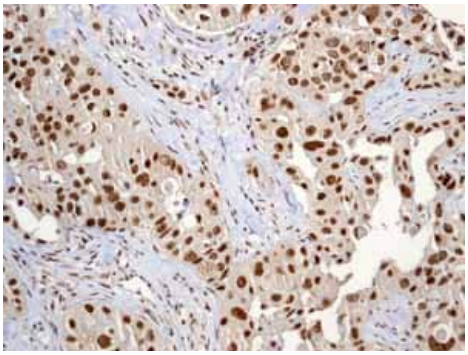
Secondary
All lanes : HRP labelled goat anti-rabbit at 1/1000 dilution

Predicted band size: 68 kDa
Observed band size: 90 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)
This image is courtesy of an anonymous Abreview

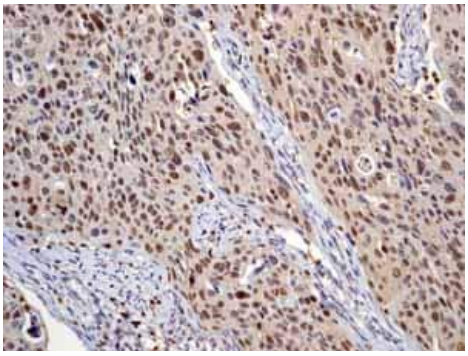
Unpurified ab76026 staining Nrf2 (phospho S40) in Human normal lung tissue sections by IHC-P (Formaldehyde-fixed paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% casein for 30 minutes at 4°C. Antigen retrieval was by heat mediation. Samples were incubated with primary antibody (1/50) in 1% casein for 24 hours at 4°C. An undiluted HRP-conjugated Goat polyclonal to rabbit IgG was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Unpurified ab76026 showing positive staining in Breast carcinoma tissue.

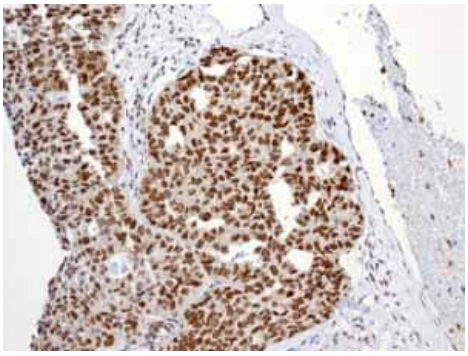
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Unpurified ab76026 showing positive staining in Cervical carcinoma tissue.

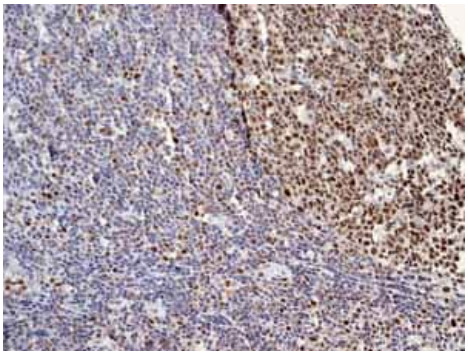
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Unpurified ab76026 showing positive staining in Ovarian carcinoma tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

Unpurified ab76026 showing positive staining in Normal tonsil tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Anti-Nrf2 (phospho S40) antibody [EP1809Y] (ab76026)

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