


Product datasheet

Anti-Nrf2 antibody ab31163

★★★★☆ [24 Abreviews](#) [332 References](#) [4 Images](#)

Overview

Product name	Anti-Nrf2 antibody
Description	Rabbit polyclonal to Nrf2
Host species	Rabbit
Specificity	Some customers have used this antibody successfully in western blot however our latest tests were unsuccessful and therefore we can no longer guarantee this application. We would recommend ab62352 as an alternative.
Tested applications	Suitable for: IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Chicken, Cow 
Immunogen	Synthetic peptide within Human Nrf2 aa 550 to the C-terminus. The exact sequence is proprietary. Database link: Q16236
General notes	<p>This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab31163 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
IHC-P	★★★★★ (5)	1/100. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
ICC/IF	★★★★★ (4)	Use at an assay dependent concentration.

Target

Function

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.

Tissue specificity

Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in fetal muscle.

Sequence similarities

Belongs to the bZIP family. CNC subfamily.
Contains 1 bZIP domain.

Domain

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

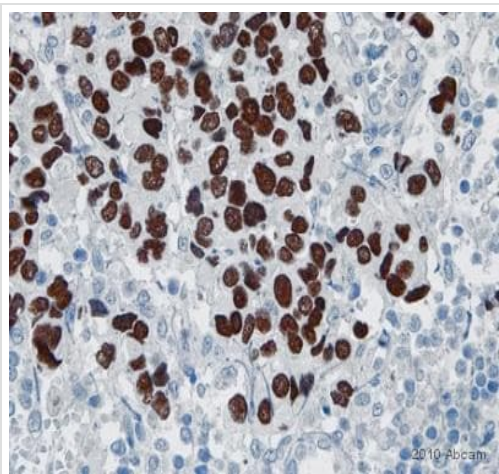
Post-translational modifications

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

Cellular localization

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

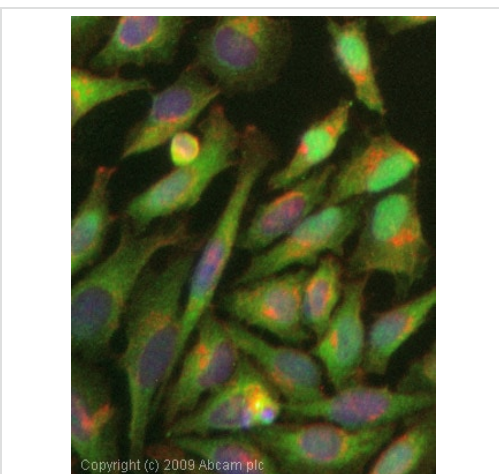
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 antibody (ab31163)

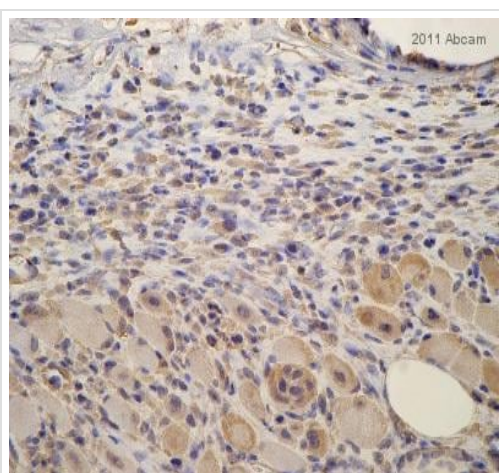
Image is courtesy of an anonymous Abreview

ab31163 staining Nrf2 in Human lymph node tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 10% serum for 1 hour at 20°C; antigen retrieval was by heat mediation in a citric buffer. Samples were incubated with primary antibody (1/100) for 12 hours at 4°C. A Biotin-conjugated Goat anti-rabbit polyclonal (1/200) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Nrf2 antibody (ab31163)

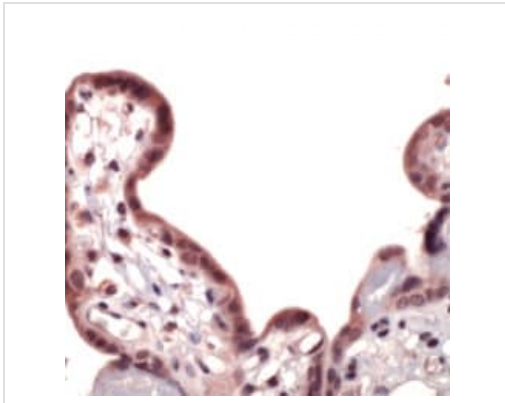
ICC/IF image of ab31163 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab31163, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 antibody (ab31163)

Image is courtesy of an anonymous Abreview

ab31163 staining Nrf2 in Mouse abdominal wall tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 5% serum for 1 hour at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/100 in milk) for 18 hours at 4°C. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.



ab31163 at 1/100 dilution, staining Nrf2 in human placenta by Immunohistochemistry (Formalin/ PFA fixed paraffin-embedded sections).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 antibody (ab31163)

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