abcam

Product datasheet

Anti-NFkB p100/NFKB2 antibody ab209799

8 Images

Overview

Product name Anti-NFkB p100/NFKB2 antibody

Description Rabbit polyclonal to NFkB p100/NFKB2

Host species Rabbit

Tested applications Suitable for: IHC-P, WB, ICC/IF

Species reactivity Reacts with: Human

Immunogen Recombinant fragment corresponding to Human NFkB p100/NFKB2 aa 700 to the C-terminus.

Database link: Q00653-4

Run BLAST with
Run BLAST with

Positive control WB: A431 IHC-P: Human appendix, lymph node, skeletal muscle, cerebral cortex, kidney, and

testis tissues; ICC: A431 cells.

General notesThe 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.

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

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab209799 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		1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 97 kDa.
ICC/IF		Use a concentration of 0.25 - 2 µg/ml.

Target

Relevance

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domaincontaining proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFKB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasome-mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65. In concert with RELB, regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer.

Cellular localization

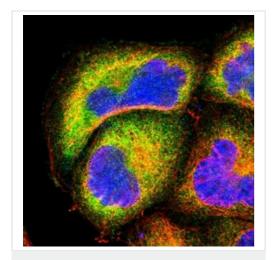
Cytoplasmic and Nuclear

Images



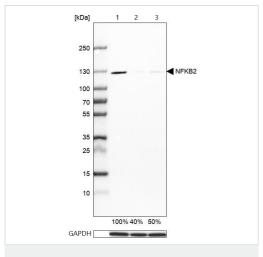
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunofluorescent analysis of A431 cells (PFA-fixed/Triton X-100 permeabilized) labeling NFkB p100/NFKB2 using ab209799 at 4 $\mu g/ml$ (green).



Western blot - Anti-NFkB p100/NFKB2 antibody (ab209799)



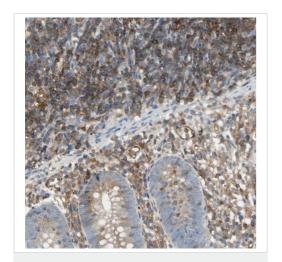
Lane 1: A431 (human epidermoid carcinoma cell line) transfected with control siRNA, cell lysate

Lane 2: A431 transfected with target specific siRNA probe #1, cell lysate

Lane 3: A431 transfected with target specific siRNA probe #2, cell lysate

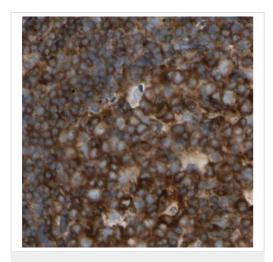
Predicted band size: 97 kDa

Loading control: Anti-GAPDH



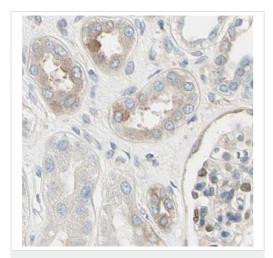
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human appendix tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



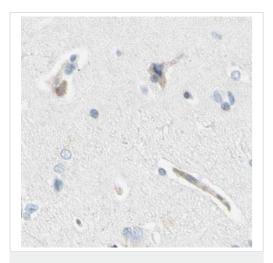
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lymph node tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



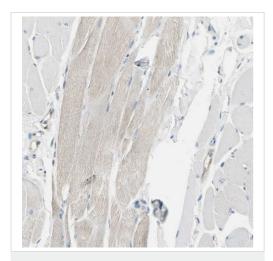
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebral cortex tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NFkB p100/NFKB2 antibody (ab209799)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue labelling p100/NFKB2 with ab209799 at 1/50 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.

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