


Product datasheet

Anti-NFκB p100/NFKB2 antibody - C-terminal ab227096

6 Images

Overview

Product name	Anti-NFκB p100/NFKB2 antibody - C-terminal
Description	Rabbit polyclonal to NFκB p100/NFKB2 - C-terminal
Host species	Rabbit
Specificity	ab227096 specifically recognizes the NFκB p100/NFKB2 isoform, but not the cleaved p52 isoform.
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Recombinant fragment within Human NFκB p100/NFKB2 (C terminal). The exact sequence is proprietary. Database link: Q00653
Positive control	WB: A431 cell extract; HeLa whole cell extract; HeLa, HepG2 and NIH/3T3 whole cell lysates. IP: Jurkat whole cell lysate.
General notes	This product was previously labelled as NFκB p100

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 79.99% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab227096** 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		1/500 - 1/3000. Predicted molecular weight: 97 kDa.
IP		1/100 - 1/500.

Target

Relevance

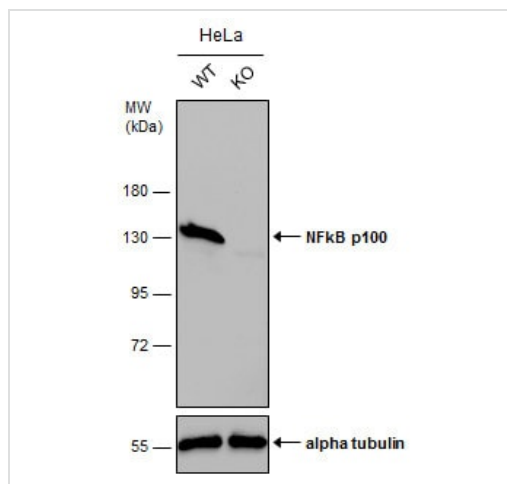
NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing 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



Western blot - Anti-NFkB p100/NFKB2 antibody - C-terminal (ab227096)

All lanes : Anti-NFkB p100/NFKB2 antibody - C-terminal (ab227096) at 1/500 dilution

Lane 1 : WT HeLa cell extract

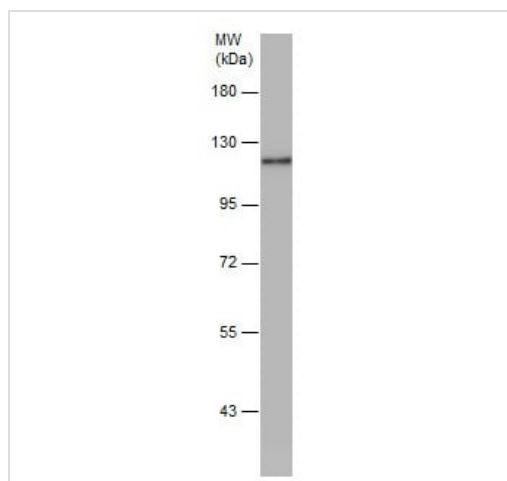
Lane 2 : NFkB p100/NFKB2 Knockout HeLa cell extracts

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG

Predicted band size: 97 kDa

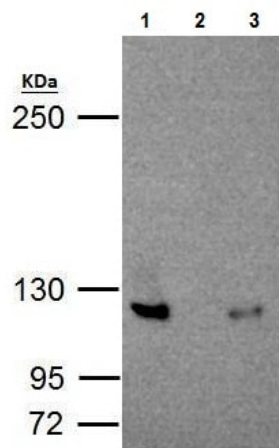


Western blot - Anti-NFkB p100/NFKB2 antibody - C-terminal (ab227096)

Anti-NFkB p100/NFKB2 antibody - C-terminal (ab227096) at 1/1000 dilution + A431 (human epidermoid carcinoma cell line) whole cell extract at 30 µg

Predicted band size: 97 kDa

7.5% SDS-PAGE gel.



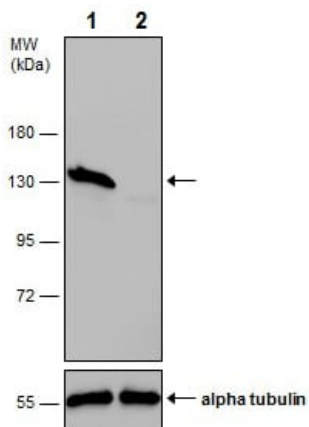
Immunoprecipitation - Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096)

NFκB p100/NFκB2 was immunoprecipitated from Jurkat (human T cell leukemia cell line from peripheral blood) with 2 μg ab227096. Western blot was performed from the immunoprecipitate using ab227096. Anti-Rabbit IgG was used as a secondary reagent.

Lane 1: Jurkat whole cell lysate 30 μg.

Lane 2: Control IP in Jurkat whole cell lysate using 2 μg of preimmune rabbit IgG.

Lane 3: ab227096 IP in Jurkat whole cell lysate.



Western blot - Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096)

All lanes : Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096) at 1/500 dilution

Lane 1 : Wild type HeLa (human epithelial cell line from cervix adenocarcinoma) cell extract

Lane 2 : NFκB p100/NFκB2 knockout HeLa (human epithelial cell line from cervix adenocarcinoma) cell extract

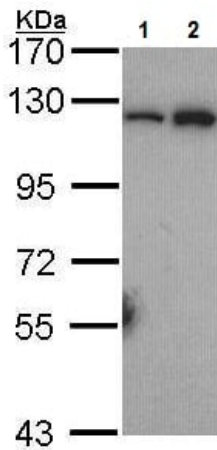
Lysates/proteins at 30 μg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 97 kDa

7.5% SDS-PAGE gel.



Western blot - Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096)

All lanes : Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096) at 1/1000 dilution

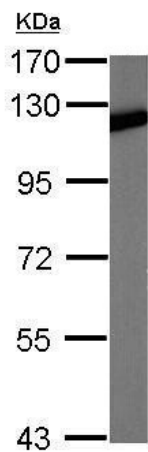
Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 30 μg per lane.

Predicted band size: 97 kDa

7.5% SDS-PAGE gel.



Western blot - Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096)

Anti-NFκB p100/NFκB2 antibody - C-terminal (ab227096) at 1/1000 dilution + NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 30 μg

Predicted band size: 97 kDa

7.5% SDS-PAGE gel.

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

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