




Product datasheet

Anti-NFkB p100/NFKB2 antibody ab131539

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Overview

Product name	Anti-NFkB p100/NFKB2 antibody
Description	Rabbit polyclonal to NFkB p100/NFKB2
Host species	Rabbit
Specificity	The antibody detects endogenous level of total NFkB-p100 protein.
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Rat 
Immunogen	Synthetic peptide corresponding to Human NFkB p100/NFKB2 aa 870-874 conjugated to keyhole limpet haemocyanin. Sequence: S-Q-S-V-E Database link: Q00653  Run BLAST with  Run BLAST with
Positive control	HeLa cells; HT29 cell extract; Human lung carcinoma tissue
General notes	<p>This antibody detects sites on p100 only. Sometimes there is a 52kDa band on WB; this is not p52. There is a cleavage site on the NFKB2 (Swiss-Prot No.: Q00653). The cleavage site is between 454 and 455 (cleavage when cotranslationally processed). The antibody can interact with the C-half sometimes. The MW. of C-half is near 52Kd.</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. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride</p> <p>PBS without Mg²⁺ and Ca²⁺</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab131539 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 - 1/1000. Predicted molecular weight: 97 kDa.
IHC-P		1/50 - 1/100.
ICC/IF		1/100 - 1/200.

Target

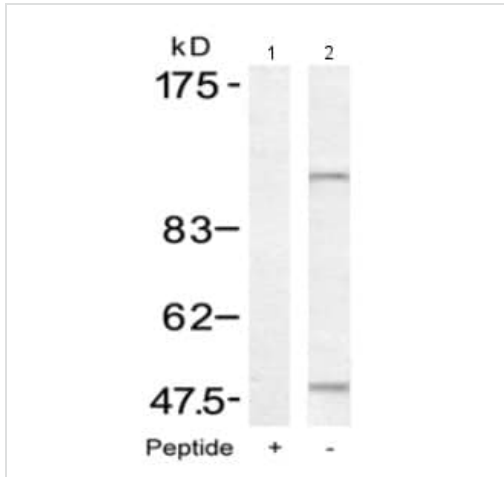
Relevance NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis 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'-GGRNYYCC-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



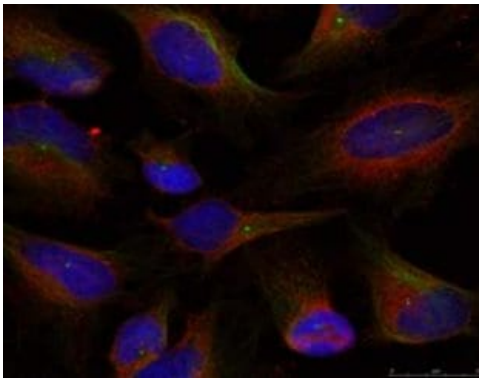
Western blot - Anti-NFkB p100/NFKB2 antibody (ab131539)

All lanes : Anti-NFkB p100/NFKB2 antibody (ab131539) at 1/500 dilution

Lane 1 : HT29 cell extract with blocking peptide

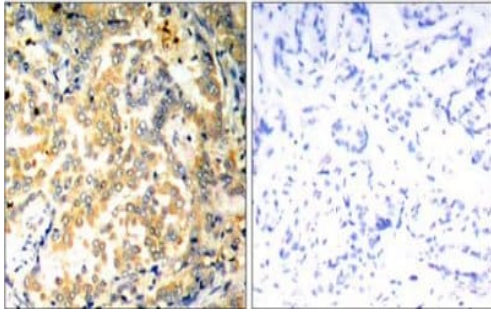
Lane 2 : HT29 cell extract

Predicted band size: 97 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NFkB p100/NFKB2 antibody (ab131539)

Immunofluorescence analysis of methanol-fixed HeLa cells labelling NFkB p100/NFKB2 with ab131539 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NFκB p100/NFKB2 antibody (ab131539)

Immunohistochemical analysis of paraffin-embedded Human lung carcinoma tissue labelling NFκB p100/NFKB2 with ab131539 at 1/50 dilution. Right panel was preincubated with blocking peptide.

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