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Datasheet for 100-4164

NFkB p50 Antibody

Overview

Description:	Anti-NFKB p50 (NFKB1) (RABBIT) Antibody - 100-4164
Item No.:	100-4164
Size:	100 µL
Applications:	ELISA, WB, Biochemical Assay, EMSA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti NFkB p50 Antibody recognizes NFKB p50 which is a component of NFKB. NFKB was originally identified as a factor that binds to the immunoglobulin kappa light chain enhancer in B cells. It was subsequently found in non-B cells in an inactive cytoplasmic form consisting of NFkB bound to IkB. NFkB was originally identified as a heterodimeric DNA binding protein complex consisting of p65 (RelA) and p50 (NFKB1) subunits. Other identified subunits include p52 (NFKB2), c-Rel, and RelB. The p65, cRel, and RelB subunits are responsible for transactivation. The p50 and p52 subunits possess DNA binding activity but limited ability to transactivate. p52 has been reported to form transcriptionally active heterodimers with the NFkB subunit p65, similar to p50/p65 heterodimers. The heterodimers of p52/p65 and p50/p65 are regulated by physical inactivation in the cytoplasm by IkB-a. IkB-a binds to the p65 subunit, preventing nuclear localization and DNA binding. Low levels of p52 and p50 homodimers can also exist in cells.
Synonyms:	rabbit Anti-NFKB p50 antibody, rabbit anti-NFKB1 antibody, NFKB, nfkb, NF-kB, NF-kappaB, NFkappaB
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	NFKB1
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	Human NFkB p50 (NFKB1) peptide corresponding to a region near the N-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This product was prepared from monospecific antiserum by delipidation and defibrination. Anti-Human NFkB p50 (NFKB1) may react non-specifically with other proteins. Control peptide (code #100-4164p) will compete only with the specific reaction of antiserum with Human NFkB p50 (NFKB1).
Relevant Links:	• NCBI - CAB94757.1 • UniProtKB - P19838 • GeneID - 4790

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	Biochemical Assay, EMSA (Based on references)
Application Note:	This product was tested by immunoblot and ELISA. Anti-Human NFkB p50 (NFKB1) is suitable for the detection by immunoblot of Human NFkB p50 (NFKB1) and its precursor protein p105, and was found to be reactive against Human NFkB p50 (NFKB1) at a dilution of 1:1000 followed by reaction with Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) code #611-1302. No reaction was observed against the analogous mouse protein. This product was also tested in a gel supershift assay and found to be reactive against p50:p50 homodimers and p:50:p65 heterodimers using 0.5 to 1.0 µl per assay.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
EMSA:	0.5 to 1.0 µl
WB:	1:500 - 1:2,000

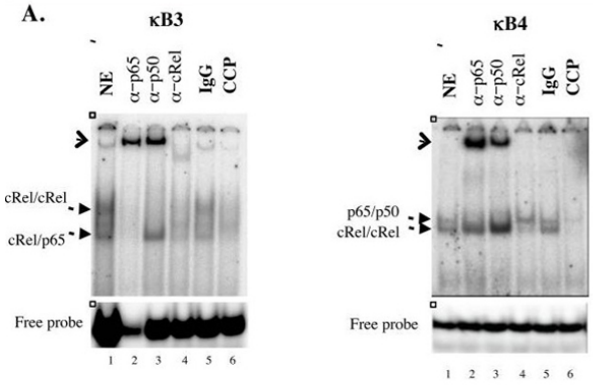
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	80 mg/mL by Refractometry
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

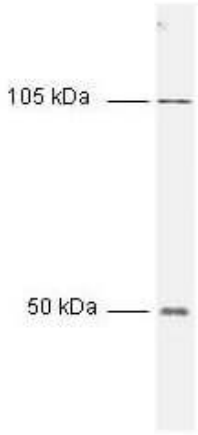
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Constitutively active NF-κB regulates eIF4E expression in KM-H2 cells.
(A) EMSA analysis of KM-H2 nuclear extracts using probes corresponding to the κB3 and κB4 sites. Supershift analysis using antibodies against NFKB p65 (p/n 100-4165), NFKB p50 p/n 100-4164), cRel and IgG control as well as competition with consensus cold probe (CCP) were done. Protein/DNA complexes are indicated by arrows and supershifted complexes by arrowheads. Free probe is also shown.
Figure 5. PMID: 23467026



Western Blot
Western Blot of Anti-NFKB p50 (NFKB1) Antibody. All incubations except color development were performed using TBS supplemented with 0.1% Tween-20 at room temperature. The membrane was blocked in 5% dry milk for 2 h. After washing, a:1:1,000 dilution of the primary antibody was added to the membrane and incubated for 2 h. Washes with buffer were performed 4 times for 5' each. The western blot was incubated with secondary antibody (HRP Goat-a-Rabbit IgG [H&L]) diluted 1:2,000 for 1 h. Washes with TBS preceded color development.

References

- Hariri F et al. The eukaryotic translation initiation factor eIF4E is a direct transcriptional target of NF-κB and is aberrantly regulated in acute myeloid leukemia. *Leukimia* (2013)
- Renard P, Ernest I, Houbion A, et al. Development of a sensitive multi-well colorimetric assay for active NFkappaB. *Nucleic Acids Res.* (2001)

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