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Datasheet for 100-4166

NFkB cRel Antibody

Overview

Description:	Anti-NFKB cRel (RABBIT) Antibody - 100-4166
Item No.:	100-4166
Size:	100 µL
Applications:	ELISA, WB, ChIP, EMSA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	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-cRel Antibody, rabbit anti-NFkB Antibody, NFKB, nfkb, NF-kB, NF-kappaB, NFkappaB, REL, c-Rel
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	REL
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	NFkB cRel peptide corresponding to a region near the C-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-NFkB cRel may react non-specifically with other proteins. Control peptide (code #100-4166p) will compete only with the specific reaction of antiserum with the NFkB cRel subunit.
Relevant Links:	• UniProtKB - Q04864 • NCBI - NP_001278675.1 • GeneID - 5966

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	ChIP, EMSA (Based on references)
Application Note:	Anti-NFkB cRel was tested by ELISA and by immunoblot. Anti-NFkB cRel is suitable for the detection by immunoblot of human NFkB cRel 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 all cRel containing human NFkB complexes 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:	1:500
WB:	1:500 - 1:3,000

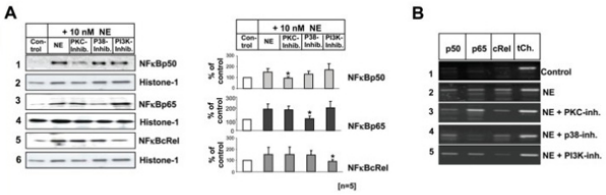
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	80 mg/ml by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

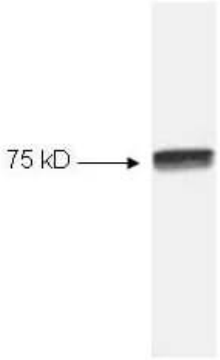
Shipping & Handling

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
Western Blot and ChIP results using NF-κB. Effects of PKC, p38MAPK or PI3K pathway inhibition on NF-κB subunits nuclear translocation in vitro: THP-1 cells were preincubated for 45 min in the absence or presence of the PKC, p38MAPK or PI3K inhibitor before treatment with NE for 15 min. (A) Nuclear extracts of THP-1 cells were immunoblotted with antibodies to p50, p65 (p/n 100-4165), cRel (p/n 100-4166) and histone-1. The signal intensity was evaluated and is summarized in the bargraphs. Statistical significant differences are indicated (*p < 0.05). Data represent the mean ± SD (n = 5). (B) The recruitment of p50, p65 and cRel-subunits to the ICAM-1 promoter was determined using ChIP-assays. Fig 3. PMID: 23114885.



Western Blot
Western blot of HeLa cell extract. 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

- Djuric Z et al. Targeting activation of specific NF-κB subunits prevents stress-dependent atherothrombotic gene expression. *Mol Med.* (2012)

Disclaimer

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