Anti-NFKB p65 (Rel A) (RABBIT) Antibody - 100-4165

Code: 100-4165 **Size:** 100 µL

Product Description: Anti-NFKB p65 (Rel A) (RABBIT) Antibody - 100-4165

Concentration: 80 mg/ml by Refractometry

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	RELA
Species Reactivity	human, mouse, rat
Buffer	None
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store NF-kappaB antibody 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.
Synonyms	rabbit Anti-NFKB p65 antibody, rabbit Anti-Rel A antibody, NFKB, nfkb, NF-kB, NF-kappaB, NFkappaB, Nuclear factor NF-kappa-B p65 subunit
Application Note	Anti-NFkB p65 (Rel A) is suitable for the detection by immunoblot of human and mouse NFkB p65 (Rel A), immunohistochemistry, and ELISA. This product was also tested in a gel supershift assay and ChIP and found to be reactive against all p65 (Rel A) containing human, mouse or rat NFkB complexes using 0.5 to 1.0 µl per assay.
Background	Anti-NFkB p65 Antibody recognizes NFKB p65 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 NFkappaB bound to IkappaB. NFkappaB 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 NFkappaB subunit p65, similar to p50/p65 heterodimers. The heterodimers of p52/p65 and p50/p65 are regulated by physical inactivation in the cytoplasm by IkappaBalpha. IkappaBalpha-binds to the p65 subunit, preventing nuclear localization and DNA binding. Low levels of p52 and p50 homodimers can also exist in cells.
Purity And Specificity	NFkB p65 (Rel A) was prepared from monospecific antiserum by delipidation and defibrination. Anti-NFkB p65 (Rel A) may react non-specifically with other proteins. Control peptide (code #100-4165p) will compete only with the specific reaction of antiserum with the NFkB p65 (Rel A) subunit.
Assay Dilutions	User Optimized
ELISA	1:5,000
Gel Shift Dilution	05 µL - 1.0 µL
Western Blot	1:2,000 - 1:5,000
Immunohistochemistry	1:400
ChIP	1 l/IP
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	NFkB p65 (Rel A) peptide corresponding to a region near the C-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).

Specific Reference

Unlap, M.T. and Jope, R.S. (1997). Dexamethasone attenuates NF-B DNA binding activity without inducing IB levels in rat brain in vivo. Molecular Brain Research 45: 83-89.Poser, I., Golob, M., Buettner, R. and Bosserhoff, A.K. (2003) Upregulation of HMG1 Leads to Melanoma Inhibitory Activity Expression in Malignant Melanoma Cells and Contributes to Their Malignancy Phenotype. Mol. Cell Biol. 23(8): 2991-2998.Ghosh M, Yang Y, Rothstein JD, Robinson MB. Nuclear factor-B contributes to neuron-dependent induction of glutamate transporter-1 expression in astrocytes. J. Neurosci. 2011 Jun 22;31(25):9159-9169. Jobin, C, et al. (1999) Curcumin blocks cytokine-mediated NF-kappa B activation and proinflammatory gene expression by inhibiting inhibitory factor I-kappa B kinase activity. J. Immunol. 163(6): 3474-3483.Cao S, Zhang X, Edwards JP, Mosser DM. (2006) NF-kappaB1 (p50) homodimers differentially regulate pro- and anti-inflammatory cytokines in macrophages. J. Biol. Chem. 2006 Sep 8;281(36):26041-26050. Lou H, Kaplowitz N. (2007) Glutathione depletion down-regulates tumor necrosis factor alpha-induced NF-kappaB activity via IkappaB kinase-dependent and -independent mechanisms. J. Biol. Chem. 2007 Oct 5;282(40):29470-29481. Yoon C, Korade Z, Carter BD.(2008) Protein kinase A-induced phosphorylation of the p65 subunit of nuclear factor-kappaB promotes Schwann cell differentiation into a myelinating phenotype. J. Neurosci. 2008 Apr 2;28(14):3738-3746.Begley LA, Kasina S, Mehra R, et al. (2008) CXCL5 promotes prostate cancer progression. Neoplasia. 2008 Mar;10(3):244-254.Limpert Allison S. ; Carter BD. (2010) Axonal Neuregulin 1 Type III Activates NF-kappa B in Schwann Cells during Myelin Formation. Journal Biological Chemistry 285 (22): 16614-16622 DOI: 10.1074/jbc.M109.098780 Published: MAY 28 2010

Related Products

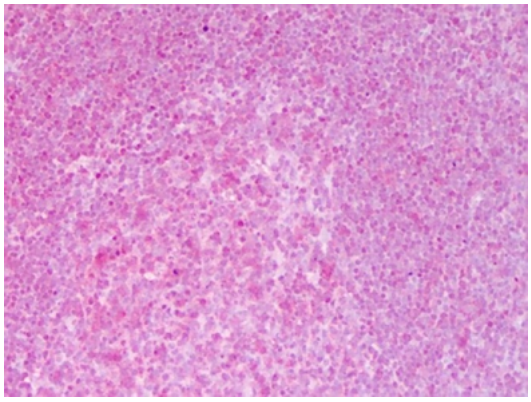
100-401-401	Anti-AKT (RABBIT) Antibody - 100-401-401
100-4164	Anti-NFKB p50 (NFKB1) (RABBIT) Antibody - 100-4164
100-4166	Anti-NFKB cRel (RABBIT) Antibody - 100-4166
100-4184	Anti-NFKB p105 (RABBIT) Antibody - 100-4184

Related Links

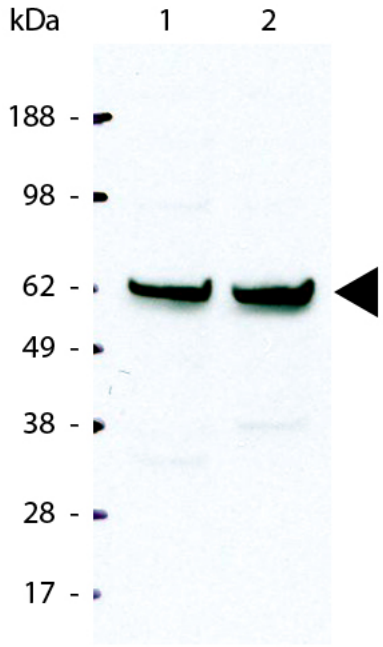
	NCBI - 223468676
http://www.ncbi.nlm.nih.gov/protein/223468676	
UniProtKB - Q04206	http://www.uniprot.org/uniprot/Q04206
	GeneID - 5970

Images

1 Immunohistochemistry of NFKB p65 (Rel A) antibody. Tissue: lymphocytes and germinal center cells of the tonsil.Fixation: formalin fixed paraffin embedded. Antigen retrieval: user optimized.Primary antibody: NFKB p65 (Rel A) antibody at 1:400.Secondary antibody: Peroxidase goat anti-rabbit at 1:10,000 for 45 min at RT.Localization: nuclear and occasionally cytoplasmic.Staining: Moderate positive nuclear or cytoplasmic staining was observed in lymphocytes and germinal center cells of the tonsil.



2 Western Blot of Rabbit anti-NFkB p65 (Rel A) antibody. Lane 1: HeLa cell extract. Lane 2: HeLa cell extract. Load: 35 µg per lane.Primary antibody: NFkB p65 Rel A antibody at 1:5000 for 2 H at RT.Secondary antibody: Peroxidase rabbit secondary antibody at 1:2000 for 60 min at RT.Block: 5% BLOTTO 2 H at RT.Predicted/Observed size: ~65 kDa, ~65 kDa for NFkb p65 Rel A. Other band(s): None.



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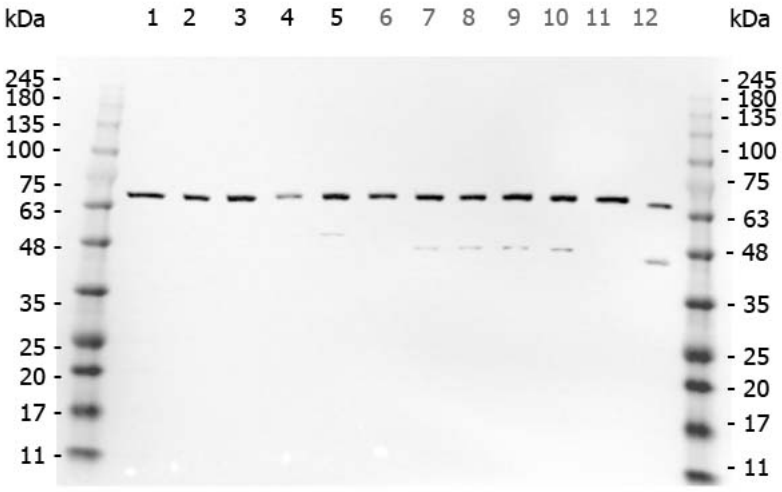
Western Blot of Rabbit anti-NFkB antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-363).Lane 3: MCF-7 Lysate (p/n W09-000-360).Lane 4: Jurkat Lysate (p/n W09-000-370).Lane 5: A431 Lysate (p/n W09-000-361).Lane 6: A549 Lysate (p/n W09-001-372).Lane 7: LNCap Lysate (p/n W09-001-GJ9).Lane 8: MOLT-4 Lysate (p/n W09-001-GK2).Lane 9: Ramos Lysate (p/n W09-000-GK4).Lane 10: Raji Lsyate (p/n W09-001-368).Lane 11: A-172 Lysate (p/n W09-001-GL5).Lane 12: NIH/3T3 Lysate (p/n W10-000-358).Load: 10 µg per lane.Primary antibody: NFkB antibody at 1:500 overnight at 4C.Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT.Blocking Buffer: 1% Casein-TTBS for 30 min at RT.Predicted/Observed size: 65 kDa for NFkB.



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