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PRODUCT DATASHEET

Anti-NF-kB p65 (Ser316) Antibody

phosphosolutions ANTIBODIES THAT WORK Pooled Serum

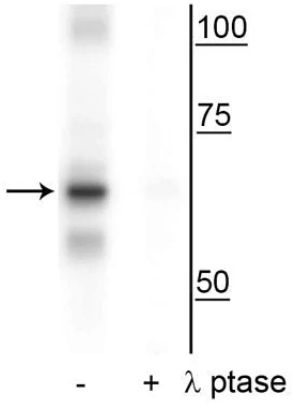
Product Details

Available Variants	100 µL (SKU:p1350-316) 25 µL (SKU:p1350-316t)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	RELA
Host Species	Rabbit
Format	Antigen Affinity Purified from Pooled Serum
Physical State	Liquid
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Production Notes	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Mouse
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser316 of mouse NF-kB p65, conjugated to keyhole limpet hemocyanin (KLH).
Specificity	Specific for endogenous levels of the ~65 kDa NF-kB p65 protein phosphorylated at Ser316. Immunolabeling is eliminated with λ-phosphatase treatment.
Molecular Weight	62 kDa
Quality Control	Western blots performed on each lot.

Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Antibody Registry ID	AB_2756814
UniProt ID	Q04207 UniProt Summary: 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 heterodimeric RELA-NFKB1 complex appears to be most abundant one. 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. The NF-kappa-B heterodimeric RELA-NFKB1 and RELA-REL complexes, for instance, function as transcriptional activators. 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. The inhibitory effect of I-kappa-B on NF-kappa-B through retention in the cytoplasm is exerted primarily through the interaction with RELA. RELA shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Besides its activity as a direct transcriptional activator, it is also able to modulate promoters accessibility to transcription factors and thereby indirectly regulate gene expression. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1. Essential for cytokine gene expression in T-cells (PubMed:15790681). The NF-kappa-B homodimeric RELA-RELA complex appears to be involved in invasin-mediated activation of IL-8 expression. Key transcription factor regulating the IFN response during SARS-CoV-2 infection (PubMed:33440148). {ECO:0000269|PubMed:10928981, ECO:0000269|PubMed:12748188, ECO:0000269|PubMed:15790681, ECO:0000269|PubMed:17000776, ECO:0000269|PubMed:17620405, ECO:0000269|PubMed:19058135, ECO:0000269|PubMed:19103749, ECO:0000269|PubMed:20547752, ECO:0000269|PubMed:33440148}.
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.

Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
Expected Reactivity	Bovine, Canine, Goat, Guinea Pig, Rat
Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Ser316
NCBI Gene ID	19697

Product Images



Western blot of 20' UV treated HeLa lysate showing specific immunolabeling of the ~65 kDa NF-κB p65 phosphorylated at Ser316 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is eliminated by blot treatment with lambda phosphatase (lambda-Ptase, 1200 units for 30 min).