

35-1203: Polyclonal Antibody to NFkB-p65 (Phospho-Ser529)

Clonality :	Polyclonal
Application :	WB,IHC,IF
Reactivity :	Human
Gene :	RELA
Gene ID :	5970
Uniprot ID :	Q04206
Format :	Purified
Alternative Name :	NFKB3, RELA, TF65, Transcription factor p65, p65
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 529 (L-L-S(p)-G-D) derived from Human NFkB-p65.

Description

NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in 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 and the heterodimeric p65-p50 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. 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. NF-kappa-B heterodimeric p65-p50 and p65-c-Rel complexes are transcriptional activators. The NF-kappa-B p65-p65 complex appears to be involved in invasion-mediated activation of IL-8 expression. The inhibitory effect of I-kappa-B upon NF-kappa-B in the cytoplasm is exerted primarily through the interaction with p65. p65 shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex Xu C, et al (2005) Oncogene:24(28): 4486-95. McNulty SE, et al. (2004) Pigment Cell Res Apr; 17(2): 173-80. Madrid LV, et al. (2001) J Biol Chem: 276(22): 18934-40. Wang D, et al. (2000) J Biol Chem : 275(42): 32592-7.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 65kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

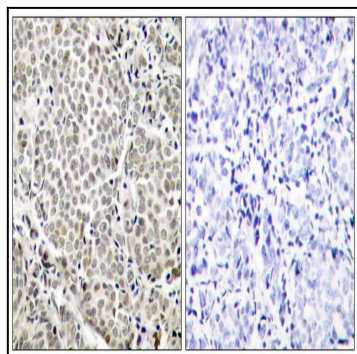


Figure 1: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NFκB-p65(Phospho-Ser529) Antibody 35-1203 (left) or the same antibody preincubated with blocking peptide(right).

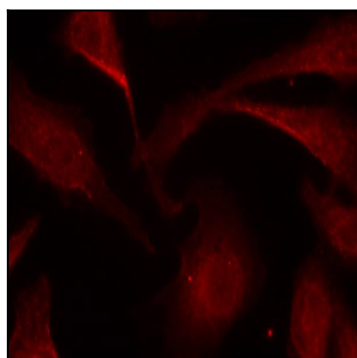


Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using NFκB-p65(Phospho-Ser529) Antibody 35-1203 .

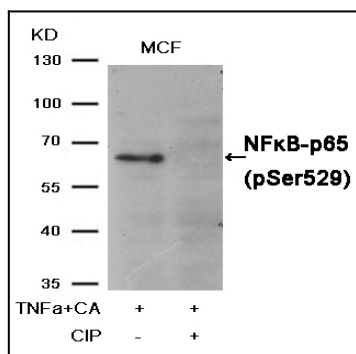


Figure 3: Western blot analysis of extracts from MCF cells, treated with TNFα+CA or calf intestinal phosphatase (CIP), using NFκB-p65 (Phospho-Ser529) Antibody 35-1203 .

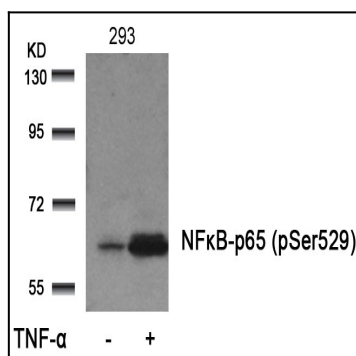


Figure 4: Western blot analysis of extracts from 293 cells untreated or treated with TNF-α using NFκB-p65 (Phospho-Ser529) Antibody 35-1203 .