

Product datasheet for **SP2092P**

NF-kB p65 (RELA) Sheep Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, EMSA, IP, WB
Recommended Dilution:	ELISA: 1:2,000. Western Blot: 1:200 - 1:1000. Immunoprecipitation. Gel Super Shift Assays.
Reactivity:	Human
Host:	Sheep
Clonality:	Polyclonal
Immunogen:	Human p65 (residues 12-317) expressed in E. coli
Specificity:	This antibody recognizes full length p65 (NF-kB), and proteolytic fragments containing the DNA binding domain. This Sheep anti Human NFkB p65 antibody will also detect proteolytic fragments of NFkB p65 containing the DNA binding RHD domain located in the amino-terminal region. Multiple isoforms of NFkB p65 are generated by alternative splicing. This antibody binds to isoforms 1 and 2 containing the intact RHD domain, but it is unclear whether it will bind to isoforms 3 and 4 which have partial differing deletions within the RHD domain.
Formulation:	PBS State: Aff - Purified State: Liquid purified IgG fraction Stabilizer: 0.5% BSA Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	RELA proto-oncogene, NF-kB subunit



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Database Link: [Entrez Gene 5970 Human Q04206](#)

Background: NFkB (Nuclear Factor NF-kappa-B) is a pleiotropic transcription factor that plays a role in many biological processes, including inflammation, immunity, differentiation, cell growth, tumorigenesis, and apoptosis. It is found as a homo- or heterodimeric complex containing the Rel-like domain containing proteins NFkB p65 (RELA/p65), RELB, NFkB1/p105, NFkB1/p50, REL and NFkB2/p52. The heterodimeric NFkB p65/p50 complex is the most abundant one. The dimers bind to kappa-B sites at their target genes, with the affinity of the interaction dependent on the subunit composition of the dimer. Furthermore, different dimers act as transcriptional activators or repressors, with the NFkB p65/p50 and p65-c-Rel complexes acting as activators.

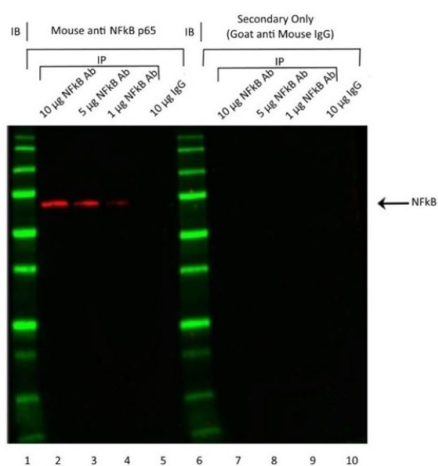
NFkB activity is controlled by several different mechanisms, including post-translational modifications, subcellular localisation and interactions with other coactivators or corepressors. NFkB complexes are held in the cytoplasm in an inactive state by interaction with members of the NFkB inhibitor (Ikb) family. Typically, phosphorylation of Ikb by Ikb kinases (IKKs) in response to different activators leads to degradation of the inhibitor, allowing NFkB to translocate into the nucleus. The inhibitory effect of Ikb is primarily exerted through their interaction with NFkB p65.

NFkB p65 is ubiquitinated leading to its proteosomal degradation, which is required for termination of the NFkB response. Phosphorylation of NFkB p65 on S536 stimulates acetylation of K310 by CBP, enhancing transcriptional activity. NFkB p65 is also acetylated at K122, enhancing DNA binding and impairing the interaction with NFkBIA. The protein is deacetylated by HDAC3.

Invasion of a host by a pathogen is frequently associated with the activation of NF-kB, which coordinates various aspects of immune function required for resistance to infection.

Synonyms: NF kappa B p65, NFkB p65, Transcription factor p65, Rel A, NFKB3

Product images:



Western blot analysis of NFkB IP samples. IP was performed on Jurkat cell lysates using 10 µg (lanes 2 & 7), 5 µg (lanes 3 & 8), 1 µg (lanes 4 & 9) Sheep anti NFkB p65 antibody (SP2092P), and 10 µg polyclonal IgG (lanes 5 & 10).