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Product datasheet for AP02556PU-N

NF-kB p65 (RELA) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western Blot: 1:500~1:1000. Immunohistochemistry: 1:50~1:100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from human NF-κB p65 around the phosphorylation site of serine 468 (L-A-SP-V-D).
Specificity:	NF-κB p65 antibody detects endogenous levels of total NF-κB p65 protein.
Formulation:	PBS(without Mg2+ and Ca2+), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified IgG
Concentration:	lot specific
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	RELA proto-oncogene, NF-kB subunit
Database Link:	Entrez Gene 5970 Human Q04206

View online »

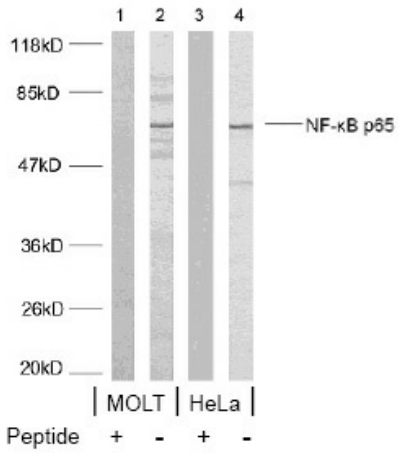
Background:

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 IkBs 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.

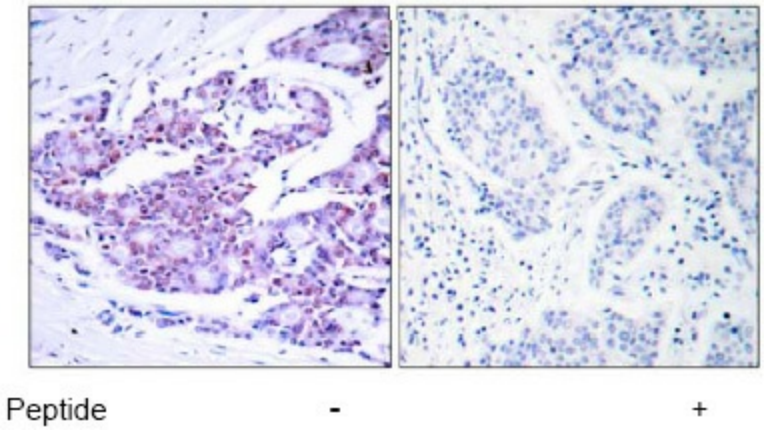
Synonyms:

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

Product images:



Western blot analysis of extracts using NF-κB p65 antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF-κB p65 antibody.