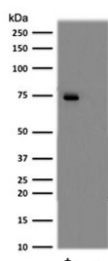


Phospho-p65 Antibody (pS529) [clone AbN84] (RQ4504)

Catalog No.	Formulation	Size
RQ4504	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

[Bulk quote request](#)

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AbN84
Purity	Protein A affinity
UniProt	Q04206
Localization	Nucleus, Cytoplasm
Applications	Western Blot : 1:500-1:2000
Limitations	This phospho-p65 antibody is available for research use only.



Western blot testing of treated (Calyculin A + TNF-alpha) and untreated human Daudi cell lysate with phospho-p65 antibody.

Description

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 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 p50-p50 and p50-c-Rel complexes are transcriptional activators. The NF-kappa-B p50-p50 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 p50. p50 shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1. Essential for cytokine gene expression in T-cells. [UniProt]

Application Notes

Optimal dilution of the phospho-p65 antibody should be determined by the researcher.

Immunogen

The amino acids surrounding a phosphorylated Serine at position 529 were used as the immunogen for the phospho-p65 antibody.

Storage

After reconstitution, the phospho-p65 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.