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| <b>Product name:</b>     | NFκB-p105 (phospho Ser932) Rabbit Polyclonal Antibody                                                                                                    |
| <b>Cat number:</b>       | ABN05096                                                                                                                                                 |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                             |
| <b>Size:</b>             | 100μL                                                                                                                                                    |
| <b>Clone:</b>            | Polyclonal                                                                                                                                               |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                                   |
| <b>Host:</b>             | Rabbit                                                                                                                                                   |
| <b>Isotype:</b>          | IgG                                                                                                                                                      |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human NF-kappaB p105/p50 around the phosphorylation site of Ser932. AA range:899-948 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                                          |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000                                                                                   |
| <b>Molecular Weight:</b> | 105kDa                                                                                                                                                   |
| <b>Purification:</b>     | Affinity purification                                                                                                                                    |
| <b>Form:</b>             | Liquid                                                                                                                                                   |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                                       |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                                                             |

**Background:**

nuclear factor kappa B subunit 1(NFKB1) Homo sapiens This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. Alternative splicing results in multiple transcript variants encoding different isoforms. Glycine-rich region (GRR) appears to be a critical element in the generation of p50. The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription activation. 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 RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing.