

## NFkB p105 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10694

## **Specification**

## NFkB p105 Antibody - Product Information

Application WB
Primary Accession P19838
Other Accession BAF84139.1

Reactivity Human, Mouse, Rat Rabbit

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 105356

## NFkB p105 Antibody - Additional Information

**Gene ID 4790** 

Application & Usage Western blotting (0.5-4 μg/ml). However,

the optimal conditions should be determined individually. The antibody recognizes the 105 kDa NFkB p105 in samples from human, mouse and rat origins. Reactivity to other species has not

been determined.

### **Other Names**

Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, NFkappaB p105, NFkB 105, NFkB105, NFkappaB 105, NFkappaB 105

**Target/Specificity** 

NFkB p105

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

### **Formulation**

 $200~\mu g$  (0.5 mg/ml) purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

### Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 



#### **Precautions**

NFkB p105 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# NFkB p105 Antibody - Protein Information

### Name NFKB1

#### **Function**

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, Ikappa-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. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105.

## **Cellular Location**

[Nuclear factor NF-kappa-B p105 subunit]: Cytoplasm

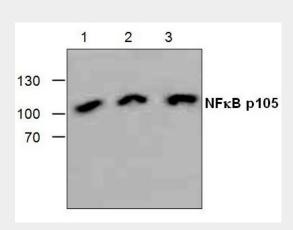
## NFkB p105 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# NFkB p105 Antibody - Images





Western blot analysis of NFkB p105 expression in lysate from 3T3 cells (Lane 1) and in Jurkat cells (Lane 2 & 3).

## NFkB p105 Antibody - Background

NFkB was identified as a sequence specific transcriptional activator that binds to the intronic enhancer of kappa light chain gene in B lymphocytes. NFkB is activated by a wide variety of stimuli such as lipopolysaccharide (LPS), pro-inflammatory cytokines, and viral infection. The active NFkB heterodimer is translocated into the nucleus and induces gene expression.