

# **Anti-NFKB1 Antibody**

Mouse Monoclonal Antibody Catalog # AP53415

# **Specification**

# **Anti-NFKB1 Antibody - Product Information**

Application WB
Primary Accession P19838
Other Accession NM\_003998
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Immunogen Recombinant human NF-κB1 p105/p50

protein

# **Anti-NFKB1 Antibody - Additional Information**

#### **Gene ID 4790**

### **Other Names**

DKFZp686C01211; DNA binding factor KBF1; DNA binding factor KBF1 EBP1; DNA-binding factor KBF1; EBP 1; EBP-1; EBP1; KBF1; MGC54151; NF kappa B; NF kappaB; NF kappabeta; NF kB1; NFkappaB; NFKB 1; NFKB p105; NFKB p50; Nfkb1; NFKB1\_HUMAN; Nuclear factor kappa B DNA binding subunit; Nuclear factor kappa-B, subunit 1; Nuclear factor NF kappa B p105 subunit; Nuclear factor NF kappa B p50 subunit; Nuclear factor NF-kappa-B p50 subunit; Nuclear factor of kappa light polypeptide gene enhancer in B cells 1; Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1; p105; p50; p84/NF-kappa-B1 p98.

#### **Dilution**

WB~~1:500

#### **Format**

PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

#### **Storage**

Store at -20 °C.Stable for 12 months from date of receipt

# **Anti-NFKB1 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

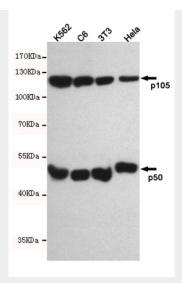
### **Anti-NFKB1 Antibody - Protocols**

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

# **Anti-NFKB1 Antibody - Images**





Western blot detection of NF-κB1 p105/p50 in K562, C6, 3T3 and Hela cell lysates using NF-κB1 p105/p50 mouse mAb(dilution 1:500).Predicted band size:120, 50kDa.Observed band size:120, 50kDa.

# **Anti-NFKB1 Antibody - Background**

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, immuni