

Anti-NFKB1 Antibody

Mouse Monoclonal Antibody

Catalog # AP53415

Product Information

Application	WB
Primary Accession	P19838
Other Accession	NM_003998
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Immunogen	Recombinant human NF- κ B1 p105/p50 protein.
Calculated MW	105356

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	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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, 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. 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.

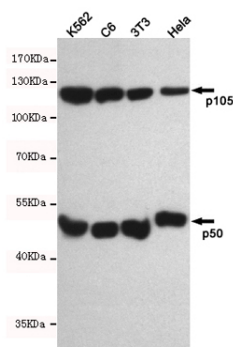
Cellular Location

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

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

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.

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