

**Anti-NF-kappaB p105/p50 Antibody**  
**Rabbit polyclonal antibody to NF-kappaB p105/p50**  
**Catalog # AP60491****Specification**

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**Anti-NF-kappaB p105/p50 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P19838</a>
Other Accession	<a href="#">P25799</a>
Reactivity	<b>Human, Mouse, Rat, Pig, Chicken, Bovine, Dog</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>105356</b>

**Anti-NF-kappaB p105/p50 Antibody - Additional Information****Gene ID** 4790**Other Names**

Nuclear factor NF-kappa-B p105 subunit; DNA-binding factor KBF1; EBP-1; Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1

**Target/Specificity**

Recognizes endogenous levels of NF-kappaB p105/p50 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

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

**Anti-NF-kappaB p105/p50 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, 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

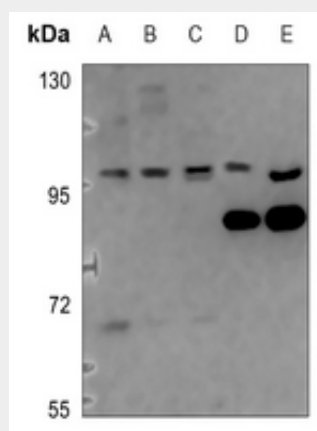
[Nuclear factor NF-kappa-B p105 subunit]: Cytoplasm

#### Anti-NF-kappaB p105/p50 Antibody - Protocols

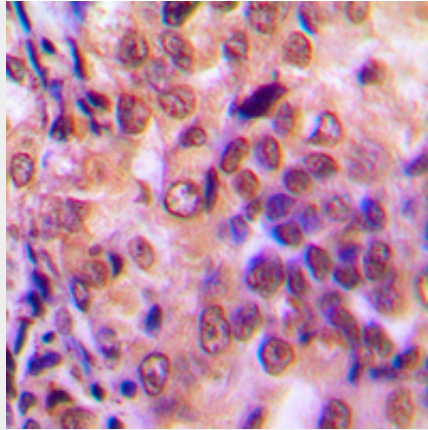
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-NF-kappaB p105/p50 Antibody - Images



Western blot analysis of NF-kappaB p105/p50 expression in MCF7 (A), U2OS (B), A375 (C), mouse muscle (D), mouse liver (E) whole cell lysates.



Immunohistochemical analysis of NF-kappaB p105/p50 staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-NF-kappaB p105/p50 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NF-kappaB p105/p50. The exact sequence is proprietary.