



## NF Kappa B/p50 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AD80301

### **Specification**

## NF Kappa B/p50 Antibody - Product info

Application IHC
Primary Accession P19838
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG2a
Calculated MW 105356

# NF Kappa B/p50 Antibody - Additional info

Gene ID 4790
Gene Name NFKB1

**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, Nuclear factor NF-kappa-B p50 subunit, NFKB1

**Dilution** 

IHC~~1:100~500

Storage

Maintain refrigerated at 2-8°C

Precautions NF Kappa B/p50 Antibody is for research

use only and not for use in diagnostic or

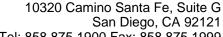
therapeutic procedures.

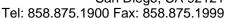
## NF Kappa B/p50 Antibody - Protein Information

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. Nucleus. Cytoplasm. Note=Nuclear, but also found in the cytoplasm in an inactive

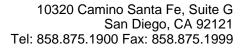
form complexed to an inhibitor (I-kappa-B)

Cellular Location

### NF Kappa B/p50 Antibody - Protocols

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

• Western Blot





• Blocking Peptides

- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NF Kappa B/p50 Antibody - Images