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KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1336

Specification

KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q00653
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 97 kDa; observed, 120 kDa KDa**
Gene Name	**NFKB2**
Aliases	**NFKB2; Nuclear Factor Kappa B Subunit 2; P49/P100; LYT-10; NF-KB2; P52; Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells 2 (P49/P100); Lymphocyte Translocation Chromosome 10 Protein; Nuclear Factor NF-Kappa-B P100 Subunit; DNA-Binding Factor KBF2; Oncogene Lyt-10 3 4; LYT10; P105; Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells; Nuclear Factor Of Kappa Light Chain Gene Enhancer In B Cells; Nuclear Factor NF-Kappa-B P52 Subunit; Nuclear Factor Kappa-B, Subunit 2; Transcription Factor NFKB2; NFKB, P52/P100 Subunit; CVID10; Lyt10; P100**
Immunogen	**A synthesized peptide derived from human NFkB p100 / p52**

KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**4791**

Other Names
Nuclear factor NF-kappa-B p100 subunit, DNA-binding factor KBF2, H2TF1, Lymphocyte translocation chromosome 10 protein, Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, Oncogene Lyt-10, Lyt10, Nuclear factor NF-kappa-B p52 subunit, NFKB2, LYT10

KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal Antibody - Protein Information

Name NFKB2

Synonyms LYT10

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. 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. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFKB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasome- mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 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. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65. In concert with RELB, regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-BMAL1 heterodimer.

Cellular Location
Nucleus. Cytoplasm. Note=Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I- kappa-B)

KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal 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

KD-Validated Anti-Nuclear Factor Kappa B Subunit 2 Rabbit Monoclonal Antibody - Images

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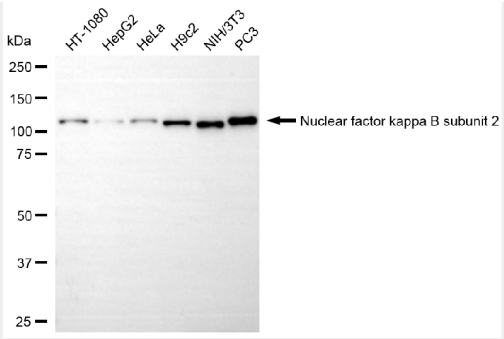
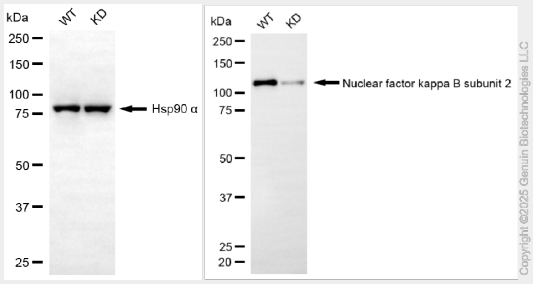
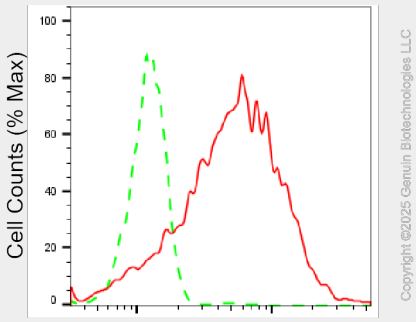


Western blotting analysis using anti-nuclear factor kappa B subunit 2 antibody (Cat#AGI1336). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-nuclear factor kappa B subunit 2 antibody (Cat#AGI1336, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.

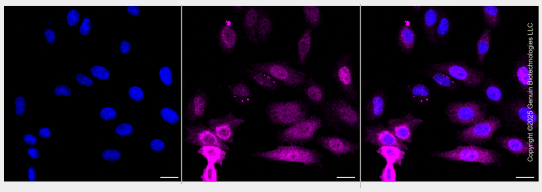


Western blotting analysis using anti-nuclear factor kappa B subunit 2 antibody (Cat#AGI1336). Nuclear factor kappa B subunit 2 expression in wild-type (WT) and nuclear factor kappa B subunit 2 (NFKB2) knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-nuclear factor kappa B subunit 2 antibody (Cat#AGI1336, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Nuclear factor kappa B subunit 2-Alexa Fluor® 647

Flow cytometric analysis of Nuclear factor kappa B subunit 2 expression in HepG2 cells using anti-Nuclear factor kappa B subunit 2 antibody (Cat#AGI1336, 1:2,000). Green, isotype control; red, Nuclear factor kappa B subunit 2.



Immunocytochemical staining of HepG2 cells with Nuclear factor kappa B subunit 2 antibody (Cat#AGI1336, 1:1,000). Nuclei were stained blue with DAPI; Nuclear factor kappa B subunit 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein

abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.