Anti-NF-kB p100 / NFKB2 Antibody [16B2] EM1901-78

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, FC
Molecular Wt:	Predicted band size: 97 kDa
Clone number:	16B2

Description: 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 complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. The proteasome-mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor.

Immunogen: Synthetic peptide within Human NFKB2 aa 1-50 / 900.

Positive control: Human tonsil tissue, human placenta tissue, A431 cell, Siha cell lysates.

Subcellular location: Nucleus, Cytoplasm.

Database links: SwissProt: Q00653 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

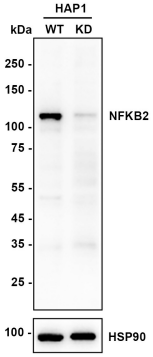

Fig1: Western blot analysis of NF-kB p100 / NFKB2 on different lysates with Mouse anti-NF-kB p100 / NFKB2 antibody (EM1901-78) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-NF-kB p100 / NFKB2 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 97 kDa
Observed band size: 120 kDa

Exposure time: 60 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1901-78) at 1/1,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

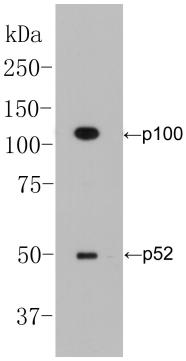

Fig2: Western blot analysis of NF-kB p100 / NFKB2 on Siha cell lysate. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (EM1901-78, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:5,000 dilution was used for 1 hour at room temperature.
Predicted band size: 97 kDa
Observed band size: 52/100 kDa

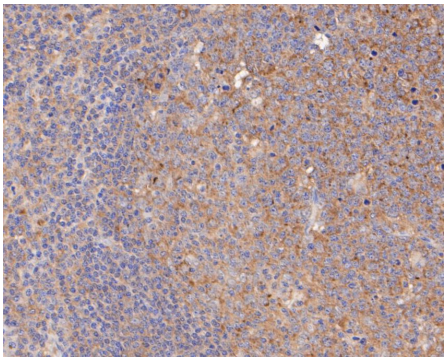

Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-NF-kB p100 / NFKB2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM1901-78, 1/100) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

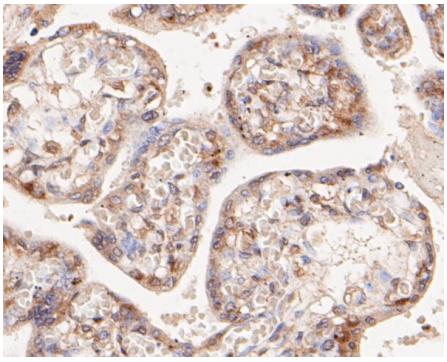

Fig4: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-NF-kB p100 / NFKB2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM1901-78, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

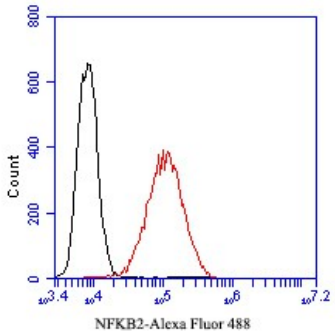

Fig5: Flow cytometric analysis of NF-kB p100 / NFKB2 was done on A431 cells. The cells were fixed, permeabilized and stained with the primary antibody (EM1901-78, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488 Goat anti-Mouse IgG antibody at 1/1,000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Dobrzanski P. et. al. Differential interactions of Rel-NF-kappa B complexes with I kappa B alpha determine pools of constitutive and inducible NF-kappa B activity. EMBO J. 13:4608-4616(1994)