

## NFkB-p105/p50 Monoclonal Antibody

Catalog No: YM0472

Reactivity: Human

**Applications:** WB;IHC;IF;FCM;ELISA

Target: NFKB1

**Fields:** >>Antifolate resistance;>>MAPK signaling pathway;>>Ras signaling

pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>NF-kappa B signaling pathway;>>HIF-1 signaling pathway;>>Sphingolipid signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Cellular senescence;>>Osteoclast differentiation;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>Cytosolic DNA-sensing pathway;>>C-type lectin receptor signaling pathway;>>IL-17

signaling pathway;>>Th1 and Th2 cell differentiation;>>Th17 cell

differentiation;>>T cell receptor signaling pathway;>>B cell receptor signaling

pathway;>>TNF signaling pathway;>>Neurotrophin signaling

pathway;>>Prolactin signaling pathway;>>Adipocytokine signaling pathway;>>Relaxin signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty

liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>A

Gene Name: NFKB1

**Protein Name:** Nuclear factor NF-kappa-B p108 subunit

P19838

Human Gene Id: 4790

**Human Swiss Prot** 

No:

Mouse Swiss Prot P25799

No:

Immunogen: Purified recombinant fragment of human NFkB-p105/p50 expressed in E. Coli.

Specificity: NFkB-p105/p50 Monoclonal Antibody detects endogenous levels of NFkB-

p105/p50 protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/4



**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 105kD

Cell Pathway: T\_Cell\_Receptor; B\_Cell\_Antigen; Stem cell pathway; Toll\_Like;

MAPK ERK Growth; MAPK G Protein; PI3K/Akt; Protein Acetylation

**P References :** 1. Cytokine. 2010 Feb;49(2):215-20.

2. Chemotherapy. 2009;55(5):381-5.

**Background:** nuclear factor kappa B subunit 1(NFKB1) Homo sapiens This gene encodes a

105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell

growth. Alternative splicing results in multiple transcript variants encoding

different isof

**Function:** domain:Glycine-rich region (GRR) appears to be a critical element in the

generation of p50.,domain:The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription

activation.,function:NF-kappa-B is a pleiotropic transcription factor which is

present in almost all cell types and is involved in many biological processed such

as inflammation, immunity, differentiation, cell growth, tumorigenesis and

apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rellike 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. Diff

Subcellular Location:

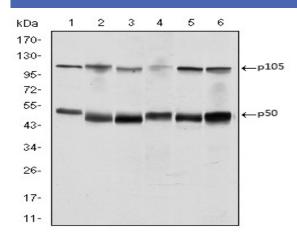
Nucleus. Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form

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

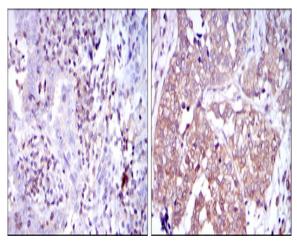
**Expression:** 

Muscle, Rectum tumor, Uterus,

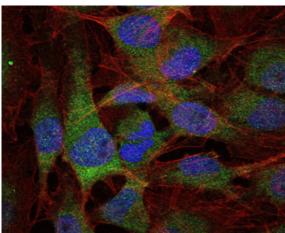
## **Products Images**



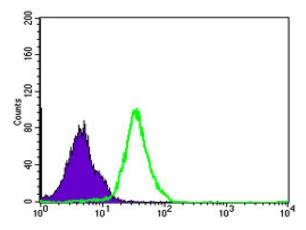
Western Blot analysis using NF $\kappa$ B-p105/p50 Monoclonal Antibody against K562 (1), Jurkat (2), A431 (3), HeLa (4), THP-1 (5) and MCF-7 (6) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human intima cancer tissues (left) and human bladder cancer tissues (right) with DAB staining using NFκB-p105/p50 Monoclonal Antibody.



Immunofluorescence analysis of U251 cells using NF $\kappa$ B-p105/p50 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of MCF-7 cells using NFkB-p105/p50 Monoclonal Antibody (green) and negative control (purple).

