For Research Use Only

## NFKB1,p105,p50-Specific Polyclonal antibody

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Catalog Number: 15506-1-AP

**Featured Product** 

21 Publications

**Basic Information** 

Catalog Number: 15506-1-AP

GenBank Accession Number: NM 003998

**Purification Method:** Antigen affinity purification

Size:

Source:

Isotype

GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 350 ug/ml by Nanodrop and 207 ug/ml by Bradford  $\,$  UNIPROT ID:

WB 1:200-1:1000 IHC 1:50-1:500

method using BSA as the standard;

P19838 Full Name:

Rabbit

nuclear factor of kappa light

polypeptide gene enhancer in B-cells

Calculated MW:

105 kDa

Observed MW:

50 kDa, 105 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, ELISA

**Cited Applications:** 

WB, IHC

Species Specificity:

human

**Cited Species:** 

human, mouse, rat, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: A431 cells, Raji cells

IHC: human stomach tissue, mouse brain tissue

## **Background Information**

NFkB 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. NFkB is is activated by various intra and extra cellular stimuli such as cytokines, oxidant free radicals, ultraviolet irradiation, and bacterial or viral products. NFkB is a family of transcription factors that consists of homo and heterodimers of NFkB1/p50 and RelA/p65 subunits, and controls a variety of cellular events including development and immune responses. All members share a conserved amino terminus domain that includes dimerization, nuclear localization, and DNA binding regions, and a carboxy terminal transactivation domain. Serines 529 and 536 in the transactivation domain of RelA/p65 are phosphorylated in response to several stimuli including phorbol ester, IL1 alpha and TNF alpha as mediated by IkB kinase and p38 MAPK. Phosphorylation of serines 529 and 536 is critical for RelA/p65 transcriptional activity. 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. 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. This antibody can bind both p105 and p50 isoforms of NFKB1.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Liu Yang	31485630	Mol Med Rep	WB
Qiang Li	30675235	Oncol Lett	WB
Shubo Zhou	33964361	J Ethnopharmacol	WB

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**

116kd→
66kd→
45kd→
35kd→

A431 cells were subjected to SDS PAGE followed by western blot with 15506-1-AP (NFKB1,p105,p50-Specific antibody) at dilution of 1:200 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 15506-1-AP (NFKB1,p105,p50-Specific antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human normal stomach slide using 15506-1-AP (NFKB1,p105,p50-Specific antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).