

NFKB1,p105,p50-Specific Polyclonal antibody

Catalog Number: 15506-1-AP

Featured Product

23 Publications

Basic Information

Catalog Number:

15506-1-AP

Concentration:

350 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_003998

GeneID (NCBI):

4790

UNIPROT ID:

P19838

Full Name:

nuclear factor of kappa light polypeptide gene enhancer in B-cells 1

Calculated MW:

105 kDa

Observed MW:

50 kDa, 105 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:200-1:1000

IHC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human

Cited Species:

human, mouse, rat, bovine

Positive Controls:

WB : A431 cells, Raji cells

IHC : human stomach tissue, mouse brain tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

NFκB is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NFκB is activated by various intra and extra cellular stimuli such as cytokines, oxidant free radicals, ultraviolet irradiation, and bacterial or viral products. NFκB is a family of transcription factors that consists of homo and heterodimers of NFκB1/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 IκB kinase and p38 MAPK. Phosphorylation of serines 529 and 536 is critical for RelA/p65 transcriptional activity. Activated NFκB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFκB has been associated with a number of inflammatory diseases while persistent inhibition of NFκB leads to inappropriate immune cell development or delayed cell growth. NFκB1 appears to have dual functions such as cytoplasmic retention of attached NF-κappa-B proteins by p105 and generation of p50 by a cotranslational processing. This antibody can bind both p105 and p50 isoforms of NFκB1.

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

Storage:

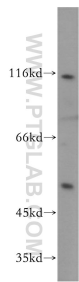
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

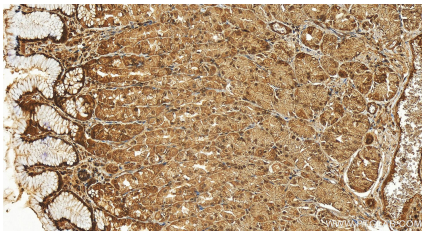
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

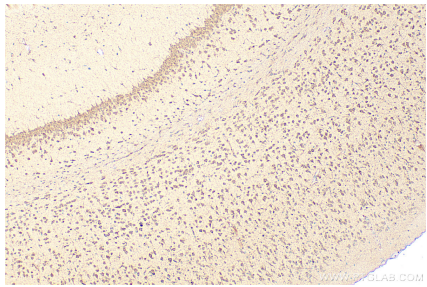
Selected Validation Data



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 paraffin-embedded 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).



Immunohistochemical analysis of paraffin-embedded 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).