

NFKB1,p105,p50 Monoclonal antibody

Catalog Number: 66992-1-Ig **9 Publications**

Basic Information

Catalog Number: 66992-1-Ig	GenBank Accession Number: BC051765	Purification Method: Protein A purification
Concentration: 1000 ug/ml	GeneID (NCBI): 4790	CloneNo.: 2G1E3
Source: Mouse	UNIPROT ID: P19838	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:2000-1:8000 IF/ICC: 1:500-1:2000 FC (Intra): 0.40 ug per 10 ⁶ cells in a 100 µl suspension
Isotype: IgG2a	Full Name: nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	
Immunogen Catalog Number: AG5832	Calculated MW: 105 kDa Observed MW: 50 kDa, 105 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls: WB : LNCaP cells, HeLa cells, Jurkat cells, K-562 cells, THP-1 cells
Cited Applications: WB, IF, ChIP	IHC : human stomach cancer tissue, human appendicitis tissue, human breast cancer tissue, human colon cancer tissue, human lymphoma tissue
Species Specificity: human, mouse	IF/ICC : HepG2 cells, FC (Intra) : HepG2 cells,
Cited Species: human, mouse	
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 extracellular 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.

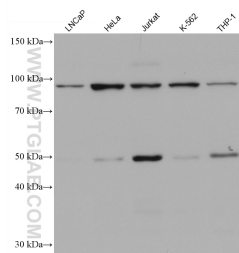
Notable Publications

Author	Pubmed ID	Journal	Application
Aihong Li	34469792	J Ethnopharmacol	IF
Yuan Yuan Zhang	39825194	Inflammation	WB
Chun-Yan Zhu	39702756	Commun Biol	WB

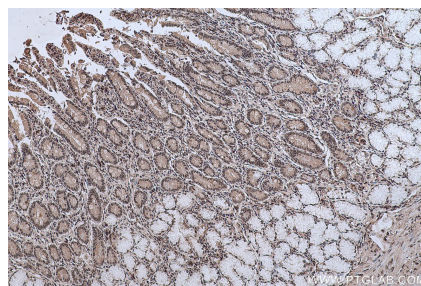
Storage

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

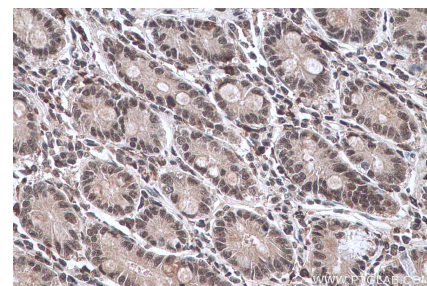
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66992-1-Ig (NFKB1,p105,p50 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



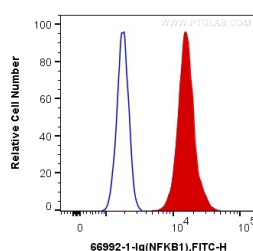
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 66992-1-Ig (NFKB1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



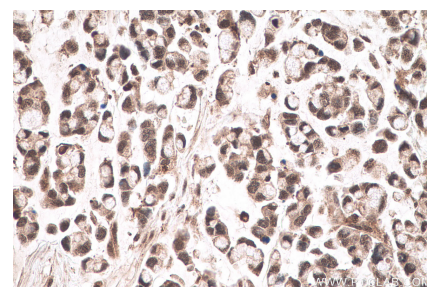
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 66992-1-Ig (NFKB1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



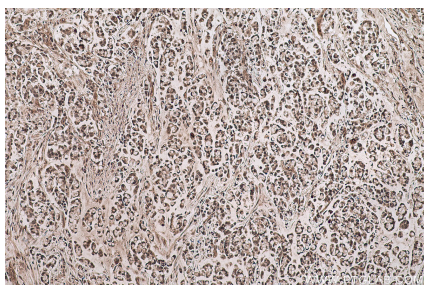
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NFKB1,p105,p50 antibody (66992-1-Ig, Clone: 2G1E3) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1×10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human NFKB1,p105,p50 (66992-1-Ig, Clone: 2G1E3) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (66360-2-Ig, Clone: K11A1B2A2) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66992-1-Ig (NFKB1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66992-1-Ig (NFKB1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).