NFκB-p105/p50(Phospho-Ser337) Antibody

Catalog No: #11017

Package Size: #11017-1 50ul #11017-2 100ul

Signalway Antibody
Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	NFκB-p105/p50(Phospho-Ser337) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of NFΓ B΄IB-p105/p50 only when phosphorylated at serine 337.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 337(R-K-S(p)-D-L) derived from Human NFκB-p105/p50.
Conjugates	Unconjugated
Target Name	NFκB-p105/p50
Modification	Phospho
Other Names	p50; KBF1; NF-kB1; NFKB-p50; NFkappaB
Accession No.	Swiss-Prot: P19838NCBI Gene ID: 4790NCBI mRNA: NM_001165412.1NCBI Protein: NP_001158884.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

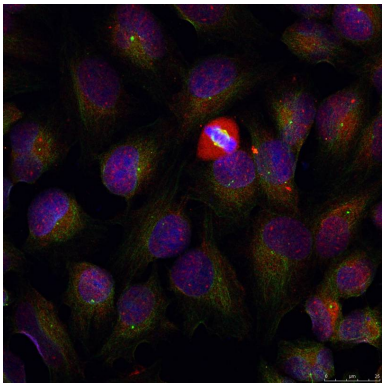
Predicted MW: 50,120kd

Western blotting: 1:500

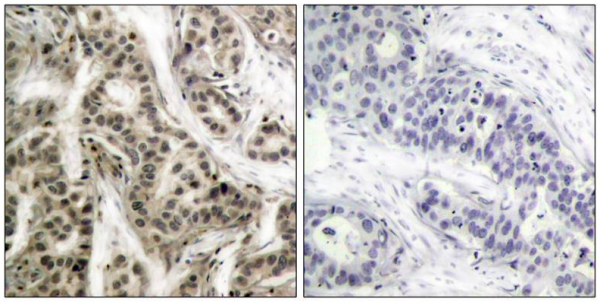
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

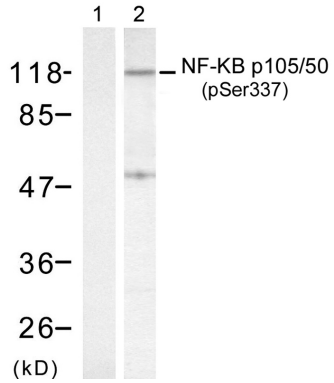
Images



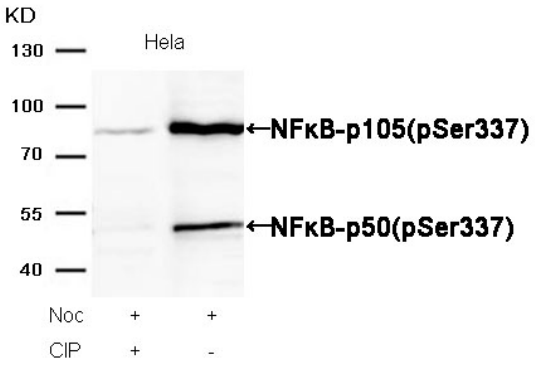
Immunofluorescence staining of methanol-fixed HeLa cells using NF-κB p105/p50 (phospho-Ser337) antibody (#11017, Red).



Immunohistochemical analysis of paraffin- embedded human breast carcinoma tissue using NF-κB p105/p50 (phospho-Ser337) antibody (#11017).



Western blot analysis of extract from HeLa cells, using NF-κB p105/p50 (phospho-Ser337) antibody (#11017, Lane 1 and 2).



Western blot analysis of extracts from Hela cells, treated with Noc or calf intestinal phosphatase (CIP), using NFκB-p105/p50(Phospho-Ser337) Antibody #11017.

Background

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 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. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors.

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. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. NF-kappa-B heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. 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. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105.

Beg A.A., Baldwin A.S. Jr.Oncogene 9:1487-1492(1994)
Guizani-Tabbane L., Ben-Aissa K., Belghith M., Sassi A., Dellagi K.Infect. Immun. 72:2582-2589(2004)
Beinke S., Robinson M.J., Hugunin M., Ley S.C.Mol. Cell. Biol. 24:9658-9667(2004)

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PMID:25754303

Note: This product is for in vitro research use only and is not intended for use in humans or animals.