

Datasheet for ABIN6256276
anti-NFKB1 antibody (pSer337)



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4 Images

Overview

Quantity:	100 µL
Target:	NFKB1
Binding Specificity:	pSer337
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NFKB1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human NF- kappaB p105/p50 around the phosphorylation site of Ser337.
Isotype:	IgG
Specificity:	Phospho-NF kappaB p105/p50 (Ser337) Antibody detects endogenous levels of NF kappaB p105/p50 only when phosphorylated at Serine 337.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog,Chicken,Xenopus
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target: NFKB1

Alternative Name: NFKB1 ([NFKB1 Products](#))

Background: Description: 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.

Gene: NFKB1

Molecular Weight: 105,50kDa

Gene ID: 4790

UniProt: [P19838](#)

Pathways: [p53 Signaling](#), [NF-kappaB Signaling](#), [RTK Signaling](#), [TCR Signaling](#), [TLR Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune](#)

Target Details

Response, Myometrial Relaxation and Contraction, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Toll-Like Receptors Cascades, BCR Signaling, S100 Proteins

Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

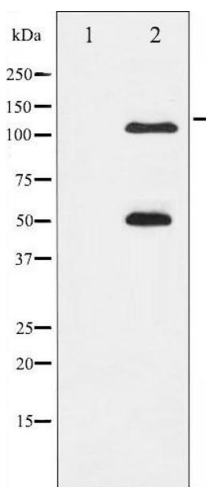
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20 °C. Stable for 12 months from date of receipt.

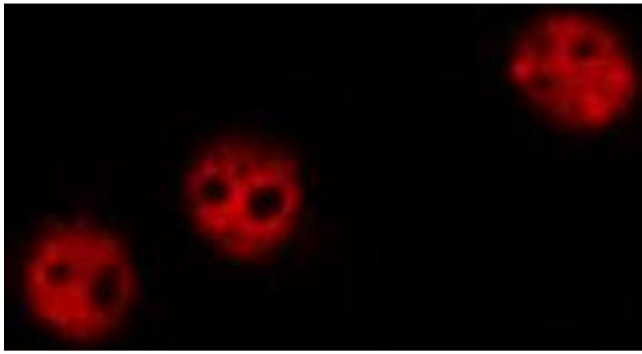
Expiry Date: 12 months

Images



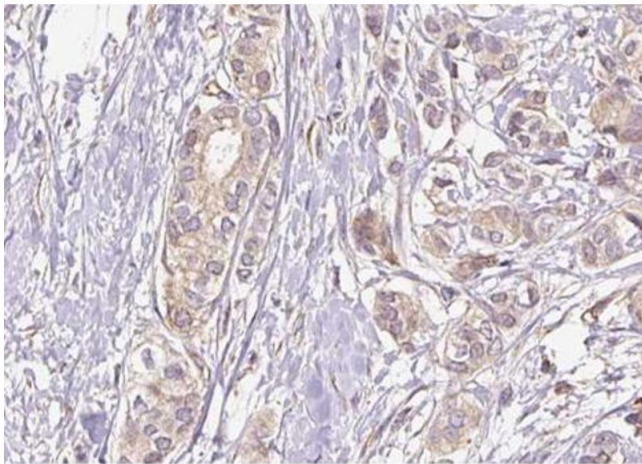
Western Blotting

Image 1. Western blot analysis of NF- kappaB p105/p50 phosphorylation expression in MDA-MB-435 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence (fixed cells)

Image 2. ABIN6267430 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



Immunohistochemistry

Image 3. ABIN6267430 at 1/100 staining human breast carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6256276.