

## NFκB-p100(Phospho-Ser870) Antibody

Catalog No: #11016

Package Size: #11016-1 50ul #11016-2 100ul

## Description

|                       |                                                                                                                                                                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | NFκB-p100(Phospho-Ser870) Antibody                                                                                                                                                                                                                                                      |
| Host Species          | Rabbit                                                                                                                                                                                                                                                                                  |
| Clonality             | Polyclonal                                                                                                                                                                                                                                                                              |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.<br>Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide. |
| Applications          | WB IHC IF                                                                                                                                                                                                                                                                               |
| Species Reactivity    | Hu Ms Rt                                                                                                                                                                                                                                                                                |
| Specificity           | The antibody detects endogenous level of NFκB1B-p100 only when phosphorylated at serine 870.                                                                                                                                                                                            |
| Immunogen Type        | Peptide-KLH                                                                                                                                                                                                                                                                             |
| Immunogen Description | Peptide sequence around phosphorylation site of serine 870(Y-G-S(p)-Q-S) derived from Human NFκB-p100.                                                                                                                                                                                  |
| Conjugates            | Unconjugated                                                                                                                                                                                                                                                                            |
| Target Name           | NFκB-p100                                                                                                                                                                                                                                                                               |
| Modification          | Phospho                                                                                                                                                                                                                                                                                 |
| Other Names           | p52; p105; H2TF1; LYT10; NF-κB2                                                                                                                                                                                                                                                         |
| Accession No.         | Swiss-Prot: Q00653NCBI Gene ID: 4791NCBI mRNA: NM_001077494.2NCBI Protein: NP_001070962.1                                                                                                                                                                                               |
| Concentration         | 1.0mg/ml                                                                                                                                                                                                                                                                                |
| Formulation           | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                            |
| Storage               | Store at -20°C                                                                                                                                                                                                                                                                          |

## Application Details

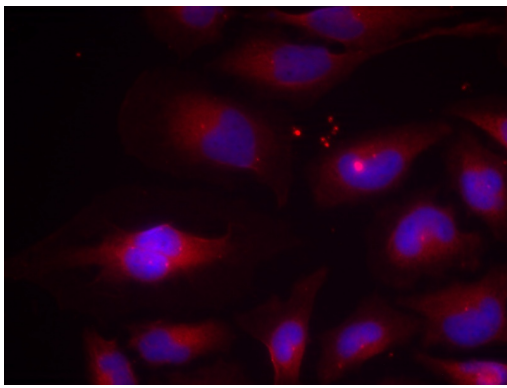
Predicted MW: 120kd

Western blotting: 1:500

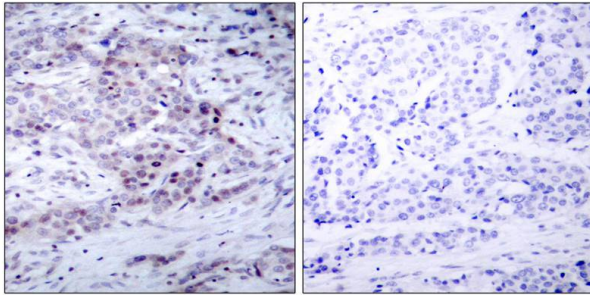
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

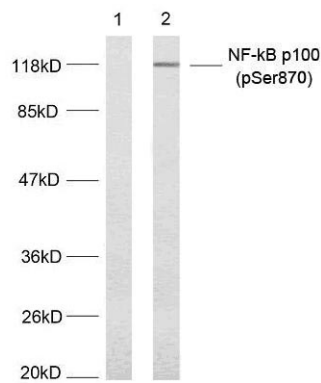
## Images



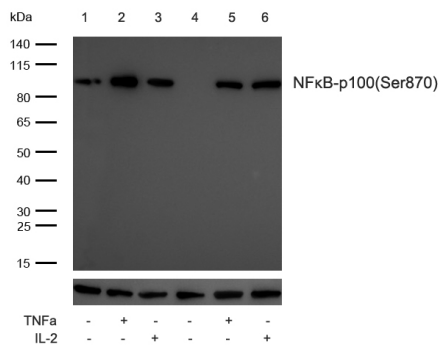
Immunofluorescence staining of methanol-fixed HeLa cells using NF-κB p100(phospho-Ser870) antibody (#11016, Red).



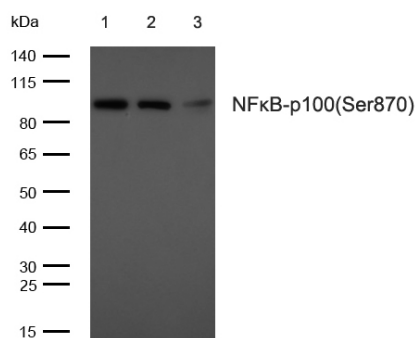
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF-κB p100(phospho-Ser870) antibody (#11016).



Western blot analysis of extract from MDA-MB-435 cells untreated or treated with TNF-α (20ng/ml, 5min) using NF-κB p100(phospho-Ser870) antibody (#11016).



All lanes : NFκB-p100(Phospho-Ser870) Antibody Antibody at 1/500 dilution Lane 1 : HeLa whole cell lysates Lane 2 : HeLa treated with 20ng/ml TNFα for 15min whole cell lysates Lane 3 : HeLa treated with 50ng/ml IL-2 for 15min whole cell lysates Lane 4 : K562 whole cell lysates Lane 5 : K562 treated with 20ng/ml TNFα for 15min whole cell lysates Lane 6 : K562 treated with 50ng/ml IL-2 for 15min whole cell lysates Lysates/proteins at 20 μg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution Predicted band size: 97 kDa Observed band size: 97 kDa Exposure time: 6 seconds



All lanes : NFκB-p100(Phospho-Ser870) Antibody Antibody at 1/500 dilution Lane 1 : Mouse liver lysates Lane 2 : Rat liver lysates Lane 3 : Rat kidney lysates Lysates/proteins at 20 μg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution Predicted band size: 97 kDa Observed band size: 97 kDa Exposure time: 7 seconds

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. 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. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFkB2/p100 associated with RelB, inducing its proteolytic processing to NFkB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFkB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasome-mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 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. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65.

Dobrzanski P., Ryseck R.P., Bravo R. EMBO J. 13:4608-4616(1994)

Betts J.C., Nabel G.J. Mol. Cell. Biol. 16:6363-6371(1996)

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