

Product datasheet for AP08022PU-S

OriGene Technologies, Inc.

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NFKB1 pSer927 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1,000.

Immunofluorescence: 1/100-1/200.

Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human

NFkB-p105/p50 around the phosphorylation site of Serine 927 (C-D-Sp-G-V).

Specificity: This antibody detects endogenous levels of NFkB-p105/p50 only when phosphorylated at

Serine 927.

Formulation: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

State: Aff - Purified

State: Liquid purified Ig fraction.

Concentration: lot specific

Purification: Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-

phosphopeptide was removed by chromatography using non-phosphopeptide corresponding

to the phosphorylation site.

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 120 kd

Gene Name: nuclear factor kappa B subunit 1

Database Link: Entrez Gene 4790 Human

P19838





Background:

NFkB is a transcription regulator that is activated by various intra and extra cellular stimuli such as cytokines, oxidant free radicals, ultraviolet irradiation, and bacterial or viral products. NFkB is a family of transcription factors that consists of homo and heterodimers of NFkB1/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 IkB kinase and p38 MAPK. Serine 529 is located in a negatively charged region (amino acids 422-540) that is phosphorylated in response to phorbol myristate acetate plus calcium ionophore activation. Phosphorylation of serines 529 and 536 is critical for RelA/p65 transcriptional activity. Activated NFkB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFkB has been associated with a number of inflammatory diseases while persistent inhibition of NFkB leads to inappropriate immune cell development or delayed cell growth.

Synonyms: NFKB1, KBF1, EBP-1, EBP1, NF-kappa-B p50

Product images:

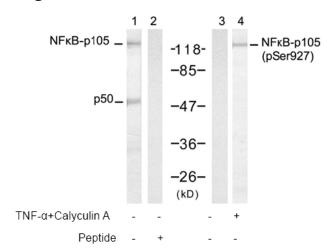


Figure 1. Western blot analysis of extract from HT-29 cells, untreated or treated with TNF-alpha and Calyculin A, using NFkB-p105/p50 antibody (Lane 1 and 2) and NFkB-p105/p50 (Phospho-Ser927) antibody (Lane 3 and 4).



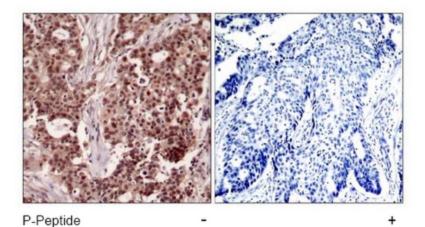


Figure 2. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using NFkB-p105/p50 (Phospho-Ser927) antibody.

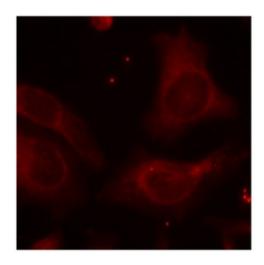


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using NFkB-p105/p50 (Phospho-Ser927 antibody (Red).