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Product datasheet for R1011

NFkB p100 / p52 (NFKB2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IP, WB
Recommended Dilution:	Suitable for Western blotting (1/1000), Immunoprecipitation and ELISA. Use control peptide at 1 µl per µl of antiserum. Recommended Dilutions: This product was assayed by immunoblot and found to be reactive against Human NFKB2 p52 at a dilution of 1:1000 followed by reaction with Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat). Anti-Human NFKB2 p52 is suitable for the detection by immunoblot of Human NFKB2 p52 and its precursor protein p100. Cross reactivity with p52 from other species may occur but has not been specifically determined. Reactivity in supershift assays has not been determined.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Human NFkB p52/p100 peptide corresponding to a region near the N-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).
Specificity:	Anti-Human NFKB2 p52 may react non-specifically with other proteins. Control peptide (R1011CP) will compete only with the specific reaction of antiserum with Human NFKB2 p52.
Formulation:	State: Serum State: Liquid (sterile filtered) purified fraction with 0.01% (w/v) Sodium Azide as preservative.
Concentration:	lot specific
Purification:	Prepared from monospecific antiserum by delipidation and defibrination.
Conjugation:	Unconjugated
Storage:	Store the antibody 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.
Gene Name:	nuclear factor kappa B subunit 2
Database Link:	Entrez Gene 4791 Human Q00653

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Background: NFκB was originally identified as a factor that binds to the immunoglobulin kappa light chain enhancer in B cells. It was subsequently found in non-B cells in an inactive cytoplasmic form consisting of NFκB bound to IκB. NFκB was originally identified as a heterodimeric DNA binding protein complex consisting of p65 (RelA) and p50 (NFKB1) subunits. Other identified subunits include p52 (NFKB2), c-Rel, and RelB. The p65, cRel, and RelB subunits are responsible for transactivation. The p50 and p52 subunits possess DNA binding activity but limited ability to transactivate. p52 has been reported to form transcriptionally active heterodimers with the NFκB subunit p65, similar to p50/p65 heterodimers. The heterodimers of p52/p65 and p50/p65 are regulated by physical inactivation in the cytoplasm by an inhibitor called IκB-α. IκB-α binds to the p65 subunit, preventing nuclear localization and DNA binding. Low levels of p52 and p50 homodimers can also exist in cells.

Synonyms: LYT10, KBF2, H2TF1, NF-kB p100, NF-kB p52, NF kappa B

Note: **Gel (Super) Shift Information:** In general, NFκB gel shift assays are assembled in 20µl reactions containing 0.28 pmoles NFκB oligo in 10mM Tris (pH 7.6), 50 mM NaCl, 0.5 mM EDTA, 1.0 mM DTT, 10% glycerol. Some procedures specify the addition of 0.05% NP-40. When using purified protein, 250-300 ng should be sufficient to produce a gel shifted complex, while 10µg HeLa nuclear extract is utilized. The gel shift reactions are then incubated at room temperature for 30 minutes. The complexes are resolved on a Tris-Glycine acrylamide gels. Loading dye containing bromophenol blue and xylene cyanol should be added to the negative control reaction only, as these dyes can increase the dissociation of the NFκB complexes.

When using HeLa nuclear extract as the source of binding proteins, two sequence-specific gel-shifted complexes are expected, consisting of p50/p50 homodimers and p50/p65 heterodimers. For cells expressing p52, p50, and p65, as many as four sequence-specific gel-shifted complexes could be observed (p52/p52, p50/p50, p52/p65, p50/p65), and if high levels of p65 are present, the p65/p65 homodimer may also be weakly detected. The following reagents have been observed to enhance NFκB binding in vitro: millimolar amounts of GTP and ATP, spermine, spermidine, barium or calcium ions, and µM amounts of Co+3(NH3)6.