abcam

Product datasheet

Anti-NF-kB p65 antibody [112A1021] ab13594

2 Abreviews 2 References 画像数 5

製品の概要

製品名	Anti-NF-kB p65 antibody [112A1021]
製品の詳細	Mouse monoclonal [112A1021] to NF-kB p65
由来種	Mouse
アプリケーション	**適用あり:** WB, IHC-P, Flow Cyt **適用なし:** ICC/IF
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Cow, Pig
免疫原	Synthetic peptide corresponding to Human NF-kB p65 aa 526-539. Sequence: GLLSGDEDFSSIAD Run BLAST with Run BLAST with
ポジティブ・コントロール	Whole cell lysate from Daudi cells.
特記事項	This antibody binds to all forms of NF-KB p65, both activated (phosphorylated, dimers) and non-activated. NFkB in the nucleus is considered to be active.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium azide Constituent: PBS
精製度	Protein G purified
特記事項（精製）	This antibody is affinity purified.
ポリ/モノ	モノクローナル
クローン名	112A1021
アイソタイプ	IgG1

アプリケーション

Our Abpromise guarantee covers the use of **ab13594** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
WB	★★★★☆	Use a concentration of 2 - 5 µg/ml. Detects a band of approximately 65 kDa (predicted molecular weight: 65 kDa).
IHC-P		Use a concentration of 5 µg/ml.
Flow Cyt		Use 0.25-0.5µg for 10^6 cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

追加情報

Is unsuitable for ICC/IF.

ターゲット情報

機能

NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processed 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 p65-c-Rel complexes are transcriptional activators. The NF-kappa-B p65-p65 complex appears to be involved in invasin-mediated activation of IL-8 expression. The inhibitory effect of I-kappa-B upon NF-kappa-B the cytoplasm is exerted primarily through the interaction with p65. p65 shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1.

配列類似性

Contains 1 RHD (Rel-like) domain.

ドメイン

the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal transcription factors.

翻訳後修飾

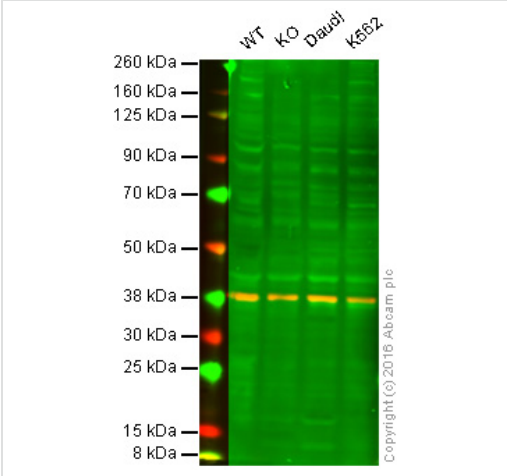
Ubiquitinated, leading to its proteasomal degradation. Degradation is required for termination of NF-kappa-B response.
Monomethylated at Lys-310 by SETD6. Monomethylation at Lys-310 is recognized by the ANK repeats of EHMT1 and promotes the formation of repressed chromatin at target genes, leading to down-regulation of NF-kappa-B transcription factor activity. Phosphorylation at Ser-311 disrupts the interaction with EHMT1 without preventing monomethylation at Lys-310 and relieves the repression of target genes.
Phosphorylation at Ser-311 disrupts the interaction with EHMT1 and promotes transcription factor activity (By similarity). Phosphorylation on Ser-536 stimulates acetylation on Lys-310 and

interaction with CBP; the phosphorylated and acetylated forms show enhanced transcriptional activity.
Reversibly acetylated; the acetylation seems to be mediated by CBP, the deacetylation by HDAC3. Acetylation at Lys-122 enhances DNA binding and impairs association with NFKBIA. Acetylation at Lys-310 is required for full transcriptional activity in the absence of effects on DNA binding and NFKBIA association. Acetylation can also lower DNA-binding and results in nuclear export. Interaction with BRMS1 promotes deacetylation of 'Lys-310'.

細胞内局在

Nucleus. Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Colocalized with RELA in the nucleus upon TNF-alpha induction.

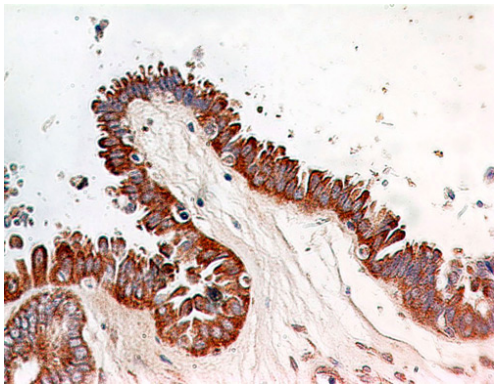
画像



Western blot - Anti-NF-kB p65 antibody [112A1021] (ab13594)

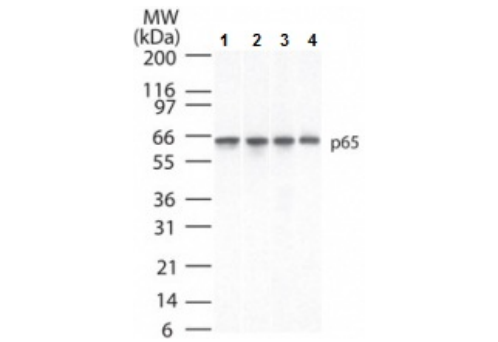
Lane 1: Wild-type HAP1 cell lysate (40 µg)
Lane 2: NF-kB p65 knockout HAP1 cell lysate (40 µg)
Lane 3: Daudi cell lysate (20 µg)
Lane 4: K562 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab13594 observed at 70 kDa. Red - loading control, ab181602, observed at 37 kDa.

ab13594 was shown to recognize NF-kB p65 when NF-kB p65 knockout samples were used, along with additional cross-reactive bands. Wild-type and NF-kB p65 knockout samples were subjected to SDS-PAGE. Ab13594 and ab181602 (loading control to GAPDH) were diluted at 5 and 1:10,000 dilution respectively and incubated overnight at 4C. Blots were developed with IRDye® 800CW Goat anti-Mouse IgG (H + L) and IRDye® 680 Goat anti-Rabbit IgG (H + L) secondary antibodies at 1:10,000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NF-kB p65 [112A1021] antibody (ab13594)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human ovarian cystadenocarcinoma tissue labelling NF-kB p65 with ab13594 at 5µg/ml. Staining was enhanced by boiling tissue sections in 10mM sodium citrate buffer, pH6.0 for 10-20 minutes followed by cooling at room temperature for 20 minutes.



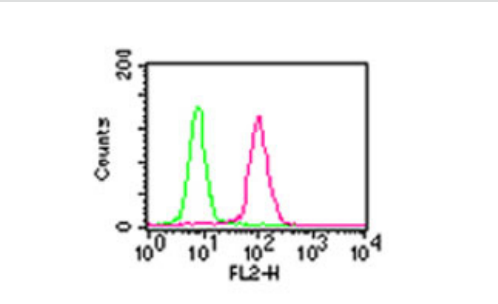
Western blot - Anti-NF-kB p65 [112A1021] antibody (ab13594)

All lanes : Anti-NF-kB p65 antibody [112A1021] (ab13594) at 2 µg/ml

Lane 1 : Ramos cell lysate
Lane 2 : Daudi cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : NIH 3T3 cell lysate

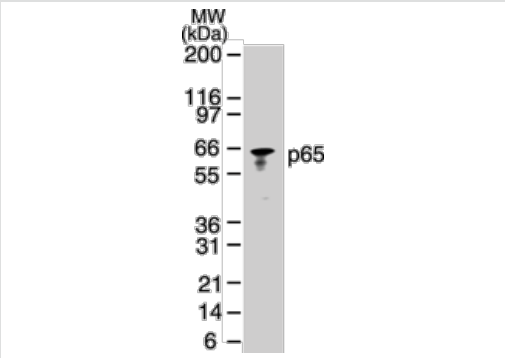
Lysates/proteins at 30 µg per lane.

Predicted band size: 65 kDa



Flow Cytometry - Anti-NF-kB p65 [112A1021] antibody (ab13594)

Flow Cytometric analysis of NF-kB p65 in HEK 293 cells labelled with ab13594 at 0.5µg (Red), or isotype control antibody (green).



Western blot - Anti-NF-kB p65 [112A1021] antibody (ab13594)

Western blot analysis of NF-kB p65 using ab13594 at 2µg/ml dilution against 10µg of Daudi cell lysate.

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