# abcam

# Product datasheet

# Anti-NF-kB p65 (phospho S529) antibody ab97726

27 References 画像数 3

製品の概要

製品名 Anti-NF-kB p65 (phospho S529) antibody

製品の詳細 Rabbit polyclonal to NF-kB p65 (phospho S529)

由来種 Rabbit

特異性 ab97726 detects endogenous levels of NFkB p65 protein only when phosphorylated at serine

529.

アプリケーション 適用あり: ICC/IF, IHC-P, WB

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Human NF-kB p65 (phospho S529).

ポジティブ・コントロール Human breast carcinoma tissue; 293 cell extracts, treated with TNF alpha; HeLa cells.

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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.

Stable for 12 months at -20°C.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

Without Mg2+ and Ca2+

精製度 Protein A purified

特記事項(精製) ab97726 was affinity purified from rabbit antiserum by affinity chromatography using epitope

specific phosphopeptide. The antibody against non phosphopeptide was removed by chromatogramphy using non phosphopeptide corresponding to the phosphorylation site.

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**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab97726の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/100 - 1/200.
IHC-P		1/50 - 1/100.
WB		1/500 - 1/1000. Predicted molecular weight: 60 kDa.

### 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

ドメイン

#### 翻訳後修飾

Contains 1 RHD (Rel-like) domain.

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

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.

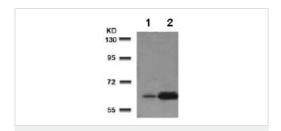
Phosphorylation at Ser-311 disrupts the interaction with EHMT1 and promotes transcription factor activity (By similarity). Phosphorylation on Ser-536 stimulates acetylation on Lys-310 and interaction with CBP; the phosphorylated and acetylated forms show enhanced transcriptional activity.

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 (phospho S529) antibody (ab97726)

**All lanes :** Anti-NF-kB p65 (phospho S529) antibody (ab97726) at 1/500 dilution

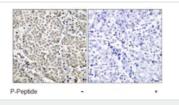
Lane 1: 293 cell extracts, untreated

Lane 2: 293 cell extracts, treated with TNF alpha

Predicted band size: 60 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NF-kB p65 (phospho S529) antibody (ab97726) ab97726 at 1/100 dilution staining methanol-fixed HeLa cells by Immunofluorescence (seen in red).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NF-kB p65 (phospho S529) antibody (ab97726)

ab97726 at 1/50 dilution staining NF-kB p65 in Human breast carcinoma by Immunohistochemistry, Paraffin-embedded tissue in the absence or presence of the immunising peptide.

 $\textbf{Please note:} \ \ \textbf{All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"}$ 

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