# abcam

# Product datasheet

# Recombinant Human NF-kB p65 protein (Tagged) ab114150

1 References 画像数 1

製品の詳細

製品名 Recombinant Human NF-kB p65 protein (Tagged)

発現系Wheat germアクセッション番号Q04206

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

配列 MDELFPLIFPAEPAQASGPYVEIIEQPKQRGMRFRYKCEGRS

AGSIPGER

STDTTKTHPTIKINGYTGPGTVRISLVTKDPPHRPHPHELVG

KDCRDGFY

EAELCPDRCIHSFQNLGIQCVKKRDLEQAISQRIQTNNNPFQ

VPIEEQRG

DYDLNAVRLCFQVTVRDPSGRPLRLPPVLSHPIFDNRAPNTA

ELKICRVN RNSGSCLGGDEIFLLCDKVQ

予測される分子量 51 kDa including tags

**領域** 1 to 220

タグ GST tag N-Terminus

特性

Our Abpromise quarantee covers the use of ab114150 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 Western blot

**ELISA** 

SDS-PAGE

製品の状態 Liquid

前処理および保存

保存方法および安定性 Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

1

#### 関連情報

#### 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, Fkappa-B is phosphorylated by Fkappa-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.

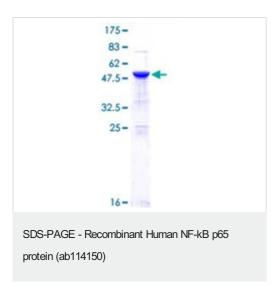
Phosphorylation at Ser-311 disrupts the interaction with EHMT1 and promotes transcription factor activity (By similarity). Phosphorylation on Ser-536 stimulates acetylation on Lys-310 and interaction with CBP; the phosphorylated and acetylated forms show enhanced transcriptional activity.

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



12.5% SDS-PAGE analysis of ab114150 stained with Coomassie Blue.

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