abcam

Product datasheet

# Recombinant Human NFkB p105 / p50 protein ab114185

画像数 1

## 製品の詳細

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| **製品名** | Recombinant Human NFkB p105 / p50 protein |
| **発現系** | Wheat germ |
| **アクセッション番号** | P19838 |
| **タンパク質長** | Full length protein |
| **Animal free** | No |
| **由来** | Recombinant |
| **生物種** | Human |
| **配列** | MAEDDPYLGRPEQMFHLDPSLTHTIFNPEVFQPQMALPTADG<br>PYLQILEQ<br>PKQRGFRFRYVCEGPSHGGLPGASSEKNKKSYPQVKICNYVG<br>PAKVIVQL<br>VTNGKNIHLHAHSLVGKHCEDGICTVTAGPKDMVVGFANLGI<br>LHVTKKKV<br>FETLEARMTEACIRGYNPGLLVHPDLAYLQAEGGGDRQLGDR<br>EKELIRQA<br>ALQQTKEMDLSVVRLMFTAFLPDSTGSFTRRLEPVVSDAIYD<br>SKAPNASN<br>LKIVRMDRTAGCVTGGEEIYLLCDKVQKDDIQIRFYEEEENG<br>GVWEGFGD<br>FSPTDVHRQFAIVFKTPKYKDINITKPASVFVQLRRKSDLET<br>SEPKPFLY<br>YPEIKDKEEVQRKRQKLMPNFSDSFGGGSGAGAGGGGMFGSG<br>GGGGGTGS<br>TGPGYSFPHYGFPTYGGITFHPGTTKSNAGMKHGTMDTESKK<br>DPEGCDKS<br>DDKNTVNLFGKVIETTEQDQEPSEATVGNGEVTLTYATGTKE<br>ESAGVQDN<br>LFLEKAMQLAKRHANALFDYAVTGDVKMLLAVQRHLTAVQDE<br>NGDSVLHL<br>AIIHLHSQLVRDLLEVTSGLISDDIINMRNDLYQTPLHLAVI<br>TKQEDVVE<br>DLLRAGADLSLLDRLGNSVLHLAAKEGHDKVLSILLKHKKAA<br>LLLDHPNG<br>DGLNAIHLAMMSNSLPCLLLLVAAGADVNAQEQKSGRTALHL<br>AVEHDNIS |

LAGCLLLEGDAHVDSTTYDGTTPLHIAAGRGSTRLAALLKAA
GADPLVEN
FEPLYDLDDSWENAGEDEGVVPGTTPLDMATSWQVFDILNGK
PYEPEFTS
DDLLAQGDMKQLAEDVKLQLYKLLEIPDPDKNWATLAQKLGL
GILNNAFR
LSPAPSKTLMDNYEVSGGTVRELVEALRQMGYTEAIEVIQAA
SSPVKTTS
QAHSLPLSPASTRQQIDELRDSDSVCDSGVETSFRKLSFTES
LTSGASLL TLNKMPHDYGQEGPLEGKI

**予測される分子量** 133 kDa including tags

**領域** 1 to 968

## 特性

Our **Abpromise guarantee** covers the use of **ab114185** 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 -80ºC. Avoid freeze / thaw cycles.

pH: 8.00
Constituents: 0.3% Glutathione, 0.79% Tris HCl

## 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, 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 RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such

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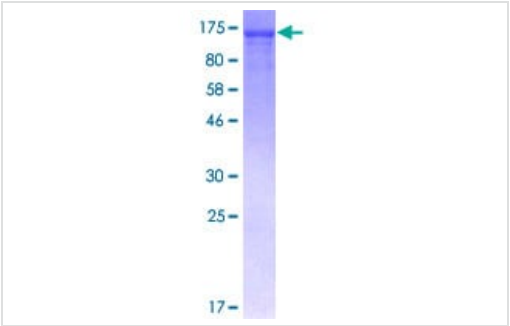
| | as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105. |
| **配列類似性** | Contains 7 ANK repeats.<br>Contains 1 death domain.<br>Contains 1 RHD (Rel-like) domain. |
| **ドメイン** | The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription activation.<br>Glycine-rich region (GRR) appears to be a critical element in the generation of p50. |
| **翻訳後修飾** | While translation occurs, the particular unfolded structure after the GRR repeat promotes the generation of p50 making it an acceptable substrate for the proteasome. This process is known as cotranslational processing. The processed form is active and the unprocessed form acts as an inhibitor (I kappa B-like), being able to form cytosolic complexes with NF-kappa B, trapping it in the cytoplasm. Complete folding of the region downstream of the GRR repeat precludes processing.<br>Phosphorylation at 'Ser-903' and 'Ser-907' primes p105 for proteolytic processing in response to TNF-alpha stimulation. Phosphorylation at 'Ser-927' and 'Ser-932' are required for BTRC/BTRCP-mediated proteolysis.<br>Polyubiquitination seems to allow p105 processing.<br>S-nitrosylation of Cys-61 affects DNA binding. |
| **細胞内局在** | Nucleus. Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor. |

## 画像




SDS-PAGE - Recombinant Human NFkB p105 / p50 protein (ab114185)

ab114185 on a 12.5% SDS-PAGE Stained with Coomassie Blue.



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