abcam

Product datasheet

Anti-NFkB p105 / p50 antibody ab131546

12 References 2 图像

概述

产品名称 Anti-NFkB p105/p50抗体

描述 兔多克隆抗体to NFkB p105 / p50

宿主 Rabbit

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Human

免疫原 Synthetic peptide conjugated to KLH, corresponding to a region around amino acids 925-929 (

) of Human NFkB p105/ p50 (NP_001158884.1).

Run BLAST with Run BLAST with

阳性对照 HeLa cells; HeLa cell extract

常规说明 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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

PBS without Mg²⁺ and Ca²⁺

纯度 Immunogen affinity purified

克隆 多克隆 同种型 lgG

The Abpromise guarantee

Abpromise™承诺保证使用ab131546于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500 - 1/1000. Predicted molecular weight: 105 kDa.
ICC/IF		1/100 - 1/200.

靶标

功能

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 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.

序列相似性

Contains 7 ANK repeats.

Contains 1 death domain.

Contains 1 RHD (Rel-like) domain.

结构域

The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription activation.

Glycine-rich region (GRR) appears to be a critical element in the generation of p50.

翻译后修饰

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.

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.

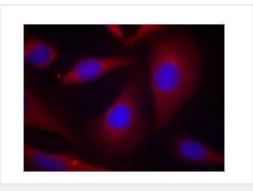
Polyubiquitination seems to allow p105 processing.

S-nitrosylation of Cys-61 affects DNA binding.

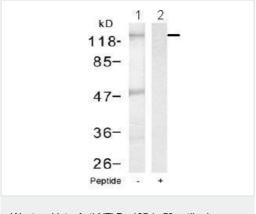
细胞定位

Nucleus. Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor.

图片



Immunocytochemistry/ Immunofluorescence - Anti-NFkB p105 / p50 antibody (ab131546) Immunofluorescent analysis of methanol-fixed HeLa cells labelling NFkB p105 / p50 with ab131546 at 1/100 dilution.



Western blot - Anti-NFkB p105 / p50 antibody (ab131546)

All lanes : Anti-NFkB p105 / p50 antibody (ab131546) at 1/500

dilution

Lane 1: HeLa cell extract

Lane 2: HeLa cell extract with blocking peptide

Predicted band size: 105 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors