

Anti-NF- κ B p65 Antibody (2K488)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	2K488
Purification:	Affinity-chromatography

Applications

Verified Activity:	<p>1. Western Blot</p> <ul style="list-style-type: none">-Positive WB detected in: Hela whole cell lysate, THP-1 whole cell lysate, MCF7 whole cell lysate, A549 whole cell lysate-All lanes: NF-κB p65 antibody at 1:500-Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution-Predicted band size: 70 kDa-Observed band size: 70 kDa <p>2. Immunofluorescence staining of PC-3 with TMAH-01037 at 1:15, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 496-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).</p> <p>3. Overlay Peak curve showing Hela cells stained with TMAH-01037 (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10⁶ cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG (H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1μg/1*10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.</p>
Application:	ELISA,FCM,IF,WB
Recommended	WB:1:500-1:2000; IF:1:50-1:200; FCM:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human RELA
Antigen Species:	Human
Gene ID:	5970
Uniprot ID:	Q04206
Synonyms:	v-rel avian reticuloendotheliosis viral oncogene homolog A;p65;NFKB3
Biology Area:	Epigenetics and Nuclear Signaling, Neuroscience, Cancer, Cardiovascular, Cell biology, Metabolism, Microbiology, Signal transduction

Research Background

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes 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. The heterodimeric RELA-NFKB1 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. The NF-kappa-B heterodimeric RELA-NFKB1 and RELA-RELB complexes, for instance, function as transcriptional activators. 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. The inhibitory effect of I-kappa-B on NF-kappa-B through retention in the cytoplasm is exerted primarily through the interaction with RELA. RELA shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Beside its activity as a direct transcriptional activator, it is also able to modulate promoters accessibility to transcription factors and thereby indirectly regulate gene expression. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1. Essential for cytokine gene expression in T-cells. The NF-kappa-B homodimeric RELA-RELB complex appears to be involved in invasin-mediated activation of IL-8 expression. Key transcription factor regulating the IFN response during SARS-CoV-2 infection.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481