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Rabbit Anti-NFKB p65 antibody

SL0465R

Product Name:	NFKB p65
Chinese Name:	The nucleus因子/k基因结合核因子抗体
Alias:	NF kB P65; NF-kB p65; NFKBp65; NF-κBp65; NF-kBp65; Avian reticuloendotheliosis viral (v rel) oncogene homolog A; MGC131774; NFKB 3; NFKB3; Nuclear Factor NF Kappa B p65 Subunit; Nuclear factor of kappa light polypeptide gene enhancer in B cells 3; Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B Cells; p65; p65 NF kappaB; p65 NFkB; RELA; Transcription Factor p65; v rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B cells 3 (p65)); V Rel Avian Reticuloendotheliosis Viral Oncogene Homolog A; v rel reticuloendotheliosis viral oncogene homolog A (avian); v-rel reticuloendotheliosis viral oncogene homolog A; p65NFKB; TF65_HUMAN.
文献引用 PubMed :	**Specific References(19)**|SL0465R has been referenced in 19 publications. **[IF=2.59]**Jiang, Wang-Lin, et al. "Neuroprotective efficacy and therapeutic window of Forsythoside B: in a rat model of cerebral ischemia and reperfusion injury." European journal of pharmacology 640.1 (2010): 75-81.**WB;Rat**. PubMed:20470770 **[IF=2.14]**Song, Yong, et al. "NF kappaB expression increases and CFTR and MUC1 expression decreases in the endometrium of infertile patients with hydrosalpinx: a comparative study." Reproductive Biology and Endocrinology 10.1 (2012): 86.**IHC-P;Human**. PubMed:23061681 **[IF=1.31]**Wang, Chunqiang, Wei Ma, and Yuhong Su. "NF-κB Pathway Contributes to Cadmium-Induced Apoptosis of Porcine Granulosa Cells." Biological trace element research (2013): 1-8.**WB;Pig**.

PubMed:23575899

[IF=3.73]Zhang, Jingyao, et al. "Effect of hydrogen-rich water on acute peritonitis of rat models." International Immunopharmacology (2014).**IHC-P;Rat**.

PubMed:24793096

[IF=2.46]Niu, Xiaofeng, et al. "Protective Effects of Chelerythrine Against Lipopolysaccharide-Induced Endotoxic Shock in Mice." Inflammation (2014): 1-8.**IHC-P;Mouse**.

PubMed:24928629

[IF=3.70]Lei, Yongfang, et al. "Potential of grape seed-derived polyphenols extract for protection against testosterone-induced benign prostatic hyperplasia in castrated rats." RSC Advances (2014).**WB;Rat**.

PubMed:not posted yet

[IF=2.17]Huang, Di, et al. "Immunostimulatory Activity of Protein Hydrolysate from Oviductus Ranae on Macrophage In Vitro." Evidence Based Complementary and Alternative Medicine 2014 (2014).**WB;Mouse**.

PubMed:25610475

[IF=2.47]Luo, Cheng, et al. "Kaempferol alleviates insulin resistance via hepatic IKK/NF-κB signal in type 2 diabetic rats." International Immunopharmacology 28.1 (2015): 744-750.**WB;Rat**.

PubMed:26263168

[IF=7.39]Ganguly, Rituparna, et al. "Anti-atherogenic Effect of Trivalent Chromium-loaded CPMV Nanoparticles in Human Aortic Smooth Muscle Cells under Hyperglycemic Conditions in vitro." Nanoscale (2016).**WB;Human**.

PubMed:26935414

[IF=2.09]Yang, Zixuan, et al. "Hypothermic machine perfusion increases A20 expression which protects renal cells against ischemia/reperfusion injury by suppressing inflammation, apoptosis and necroptosis." International Journal of Molecular Medicine (2016).**WB;Rabbit**.

PubMed:27177159

[IF=2.66]Lin, Qin-Qin, et al. "SIRT1 regulates TNF-α-induced expression of CD40 in 3T3-L1 adipocytes via NF-κB pathway." Cytokine 60.2 (2012): 447-455.**WB;Mouse**.

PubMed:22717288

[IF=3.03]Zhao, Zhe, et al. "Inhibition of NF-kappaB activation by Pyrrolidine dithiocarbamate partially attenuates hippocampal MMP-9 activation and improves cognitive deficits in streptozotocin-induced diabetic rats."Behavioural brain research 238 (2013): 44-47.**WB;Rat**.

PubMed:23089644

[IF=2.09]Yang, Zixuan, et al. "Hypothermic machine perfusion increases A20 expression which protects renal cells against ischemia/reperfusion injury by suppressing inflammation, apoptosis and necroptosis." International journal of molecular medicine (2016).**WB;Rabbit**.

PubMed:27177159

[IF=1.54]Zhang, Yuqin, et al. "Ameliorative effects of Gualou Guizhi decoction on inflammation in focal cerebral ischemic-reperfusion injury." Molecular medicine reports 12.1 (2015): 988-994.**IHC-P;Rat**.

PubMed:25815894

[IF=3.08]Jing, Xue, et al. "Beta2-GPI: a novel factor in the development of hepatocellular carcinoma." Journal of Cancer Research and Clinical Oncology 136.11 (2010): 1671-1680.**IF(ICC);Human**.

PubMed:20204408

[IF=2.87]Oyagbemi, Ademola Adetokunbo, et al. "Sodium fluoride induces hypertension and cardiac complications through generation of reactive oxygen species and activation of nuclear factor kappa beta." Environmental Toxicology (2016).**IHC-P;Rat**.

PubMed:27378751

[IF=1.35]Xi, Liqin, et al. "Immunoreactivities of NF-κB, IL-1β and IL-1R in the skin of Chinese brown frog (Rana dybowskii)." Acta Histochemica (2016).**IHC-P;Other Species**.

PubMed:27919431

[IF=4.82]Fattori, Victor, et al. "Vinpocetine reduces diclofenac-induced acute kidney injury through inhibition of oxidative stress, apoptosis, cytokine production, and NF-κB activation in mice." Pharmacological Research (2017).**IHC-P;Mouse**.

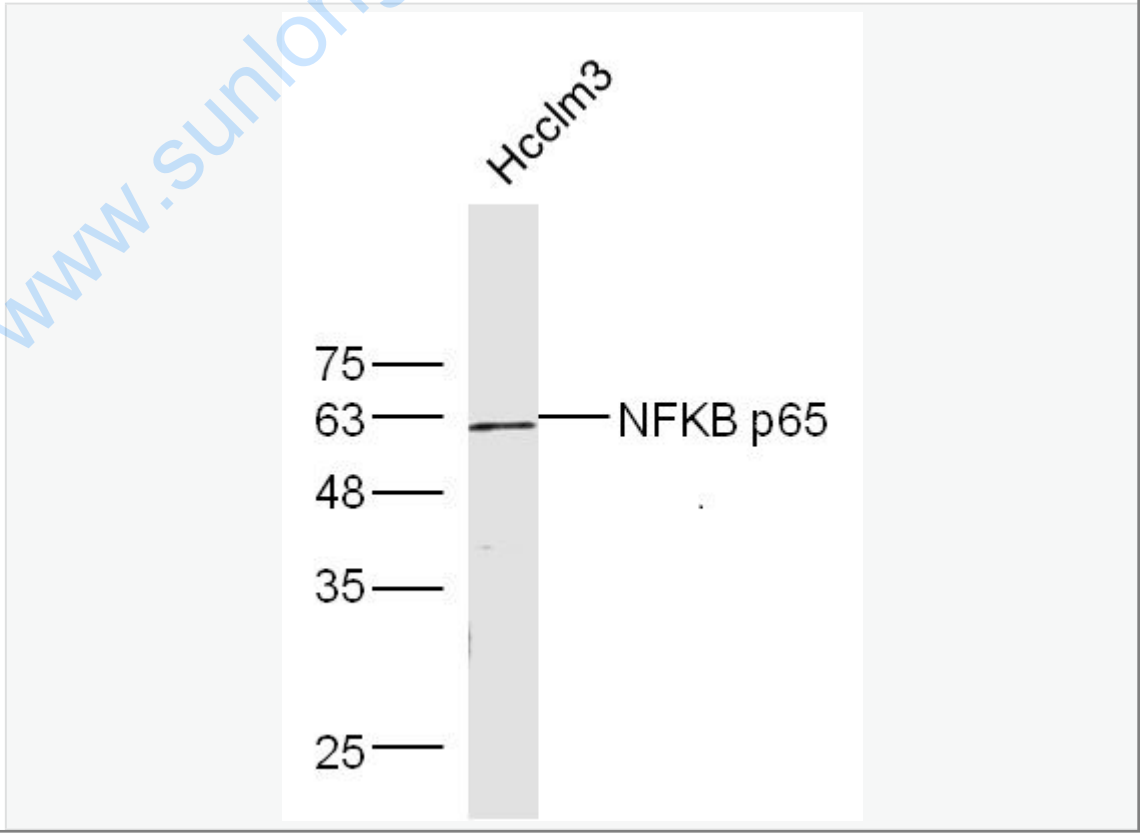
PubMed:28315429

[IF=3.74]Zheng, Jian, et al. "Lithium posttreatment confers neuroprotection through glycogen synthase kinase-3β inhibition in intracerebral hemorrhage rats." Journal of Neurosurgery (2016): 1-9.**Rat**.

	PubMed:27739937
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Danio rerio
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/Test IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	61kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NFKBp65:51-100/551
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	NF-kappa-B is a ubiquitous transcription factor involved in several biological processes. It is held in the cytoplasm in an inactive state by specific inhibitors. Upon degradation of the inhibitor, NF-kappa-B moves to the nucleus and activates transcription of specific genes. NF-kappa-B is composed of NFKB1 or NFKB2 bound to either REL, RELA, or RELB. The most abundant form of NF-kappa-B is NFKB1 complexed with the product of this gene, RELA. Four transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]. **Function:** 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 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. **Subunit:** Component of the NF-kappa-B p65-p50 complex. Component of the NF-kappa-B p65-c-Rel complex. Homodimer; component of the NF-kappa-B p65-p65 complex. Component of the NF-kappa-B p65-p52 complex. May interact with ETHE1. Binds AES and TLE1. Interacts with TP53BP2. Binds to and is phosphorylated by the activated form of either RPS6KA4 or RPS6KA5. Interacts with ING4 and this interaction may be indirect. Interacts with CARM1, USP48 and UNC5CL. Interacts with IRAK1BP1. Interacts with NFKBID. Interacts with NFKBIA. Interacts with GSK3B. Interacts with NFKBIB. Interacts with NFKBIE. Interacts with NFKBIZ. Interacts with EHMT1 (via ANK repeats). Part of a 70-90 kDa complex at least consisting of CHUK, IKBKB, NFKBIA, RELA, IKBKAP and MAP3K14. Interacts with HDAC3; HDAC3 mediates the deacetylation of RELA. Interacts with HDAC1; the interaction requires non-phosphorylated RELA. Interacts with CBP; the interaction requires phosphorylated RELA. Interacts (phosphorylated at 'Thr-254') with PIN1; the interaction inhibits p65 binding to NFKBIA. Interacts with SOCS1. Interacts with UXT. Interacts with MTDH and PHF11. Interacts with ARRB2. Interacts with human respiratory syncytial virus (HRSV) protein M2-1. Interacts with NFKBIA (when phosphorylated), the interaction is direct; phosphorylated NFKBIA is part of a SCF(BTRC)-like complex lacking CUL1. Interacts with RNF25. Interacts (via C-terminus) with DDX1. Interacts with UFL1 and COMMD1. Interacts with BRMS1; this promotes deacetylation of 'Lys-310'. Interacts with NOTCH2. Directly interacts with MEN1; this interaction represses NFKB-mediated transactivation. Interacts with AKIP1, which promotes the phosphorylation and nuclear retention of RELA. Interacts (via the RHD) with GFI1; the interaction, after bacterial lipopolysaccharide (LPS) stimulation, inhibits the transcriptional activity by interfering with the DNA-binding activity to target gene promoter DNA. **Subcellular Location:** Nucleus. Cytoplasm. Note=Colocalized with DDX1 in the nucleus upon TNF-alpha induction. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Colocalizes with GFI1 in the nucleus after LPS stimulation. **Post-translational modifications:** 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. Phosphorylation on Ser-536 stimulates acetylation on Lys-310 and interaction with CBP; the phosphorylated and acetylated forms show enhanced transcriptional activity. Phosphorylation at Ser-276 by RPS6KA4 and RPS6KA5 promotes its transactivation and transcriptional activities. Reversibly acetylated; the acetylation seems to be mediated by CBP, the deacetylation by HDAC3 and SIRT2. 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. Lys-310 is deacetylated by SIRT2. S-nitrosylation of Cys-38 inactivates the enzyme activity. Sulfhydration at Cys-38 mediates the anti-apoptotic activity by promoting the interaction with RPS3 and activating the transcription factor activity. Sumoylation by PIAS3 negatively regulates DNA-bound activated NF-kappa-B. **Similarity:** Contains 1 RHD (Rel-like) domain. **SWISS:** Q04206 **Gene ID:** 5970 **Database links:** Entrez Gene: 5970 Human Entrez Gene: 19697 Mouse Entrez Gene: 309165 Rat Omim: 164014 Human SwissProt: Q04206 Human SwissProt: Q04207 Mouse Unigene: 502875 Human Unigene: 249966 Mouse Unigene: 19480 Rat

	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. transcriptional regulatory factor（Transcriptin Regulators） NF-κBp65是一种重要的转录因子，NF-kBp65可激活参与炎症、细胞增殖、Apoptosis等基因的调节，影响着细胞的凋亡，同时影响着Tumour细胞对细胞毒性药物及离子辐射的敏感性。ras基因诱导的致癌突变作用需NFkB的活化，提示NFkB在致癌发生方面可能起一定作用；另有文献报道，在乳腺癌、非小细胞性肺癌、甲状腺癌、T或Blymphocyte白血病及病毒诱变导致的Tumour等人类Tumour中，NFkB活化或表达。 经研究认为：**NFKBp65蛋白在静息状态下以结合态的方式存在于胞浆中，当NFKBp65蛋白被激活后解离进入The nucleus。(NF-κB与其抑制蛋白IκB家族成员结合，以无活性的复合物形式存在于胞浆中，当细胞受到各种刺激后，NF- κB与IκB 解离，从而进入The nucleus，与相应的靶序列结合，调节基因的表达)** NF-κB可以保护细胞免受Tumour坏死因子以及电离辐射等引起的凋亡作用，而抑制NFkB的表达可以增加TNF等引起的Apoptosis，以及增加化疗及放疗对Tumour细胞的敏感性。
Picture:	

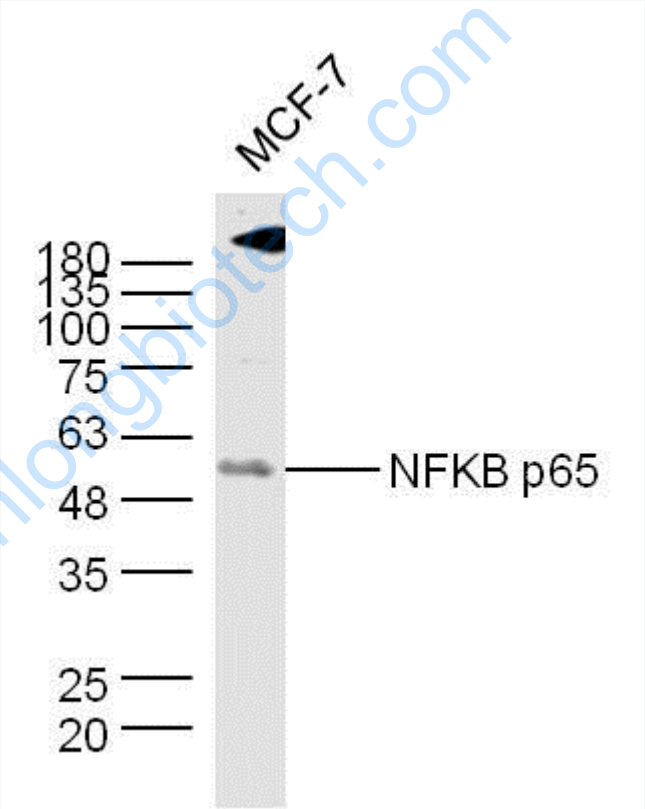
Sample: Hcclm3 Cell Lysate at 40 ug

Primary: Anti- NFKB p65 (SL0465R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



Sample:

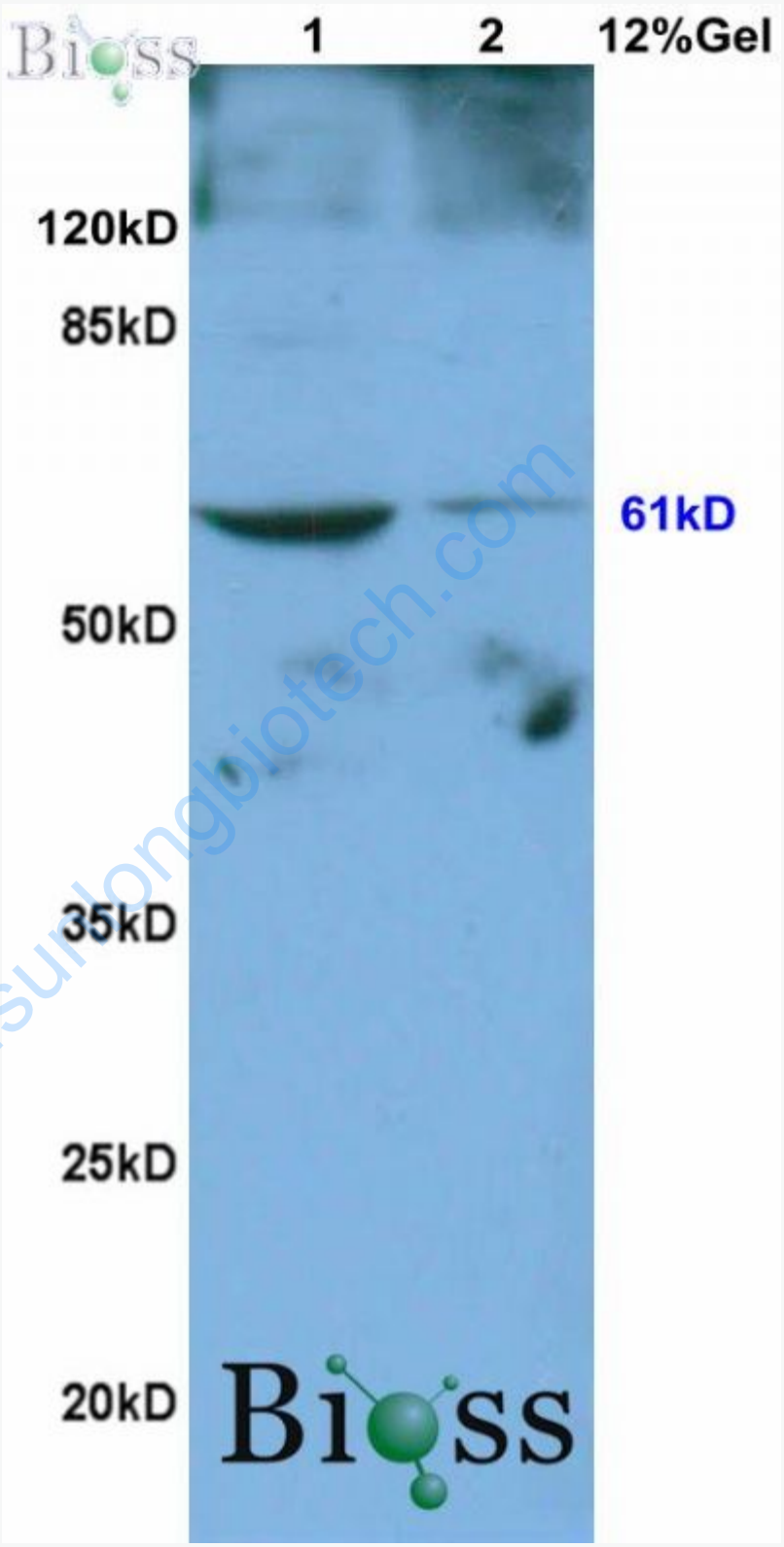
MCF-7 Cell (Human) Lysate at 30 ug

Primary: Anti-NFKB p65 (Bs- 0465R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

	Observed band size: 61 kD



Sample:

Disease Lung (Mouse) Lysate at 30 ug

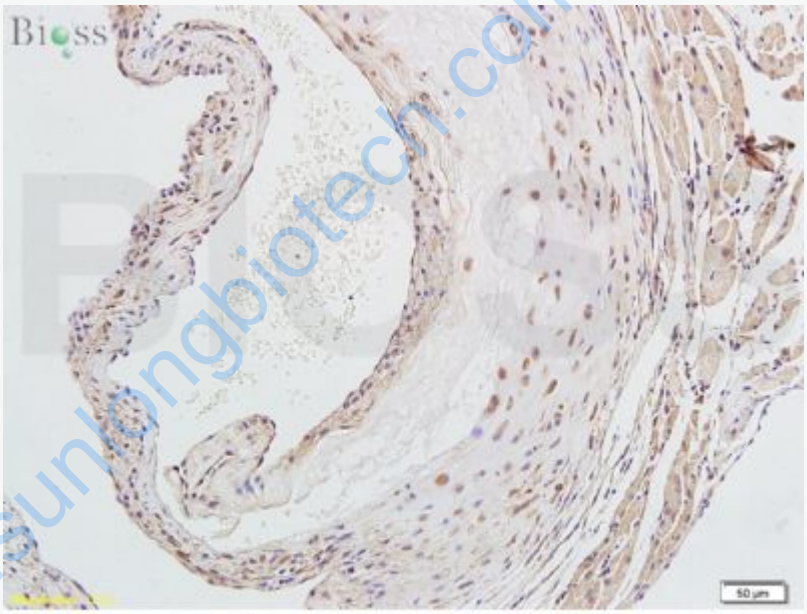
Disease Spleen (Mouse) lysate at 30 ug

Primary: Anti-NFKB p65(SL0465R) at 1/200 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL0465R) at 1/3000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



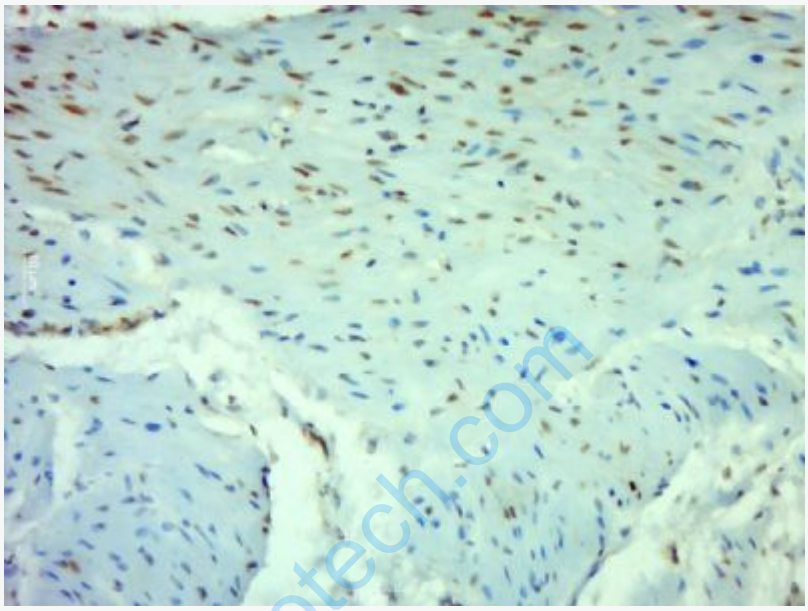
bs-0465R Anti-NFKB-p65
Formalin-fixed and paraffin-embedded rat cavity aortic tissue labeled with Rabbit Anti-NFKB-p65 Polyclonal Antibody, Unconjugated(bs-0465R) at 1:600 followed by conjugation to the secondary antibody and DAB staining

Tissue/cell: rat aorta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

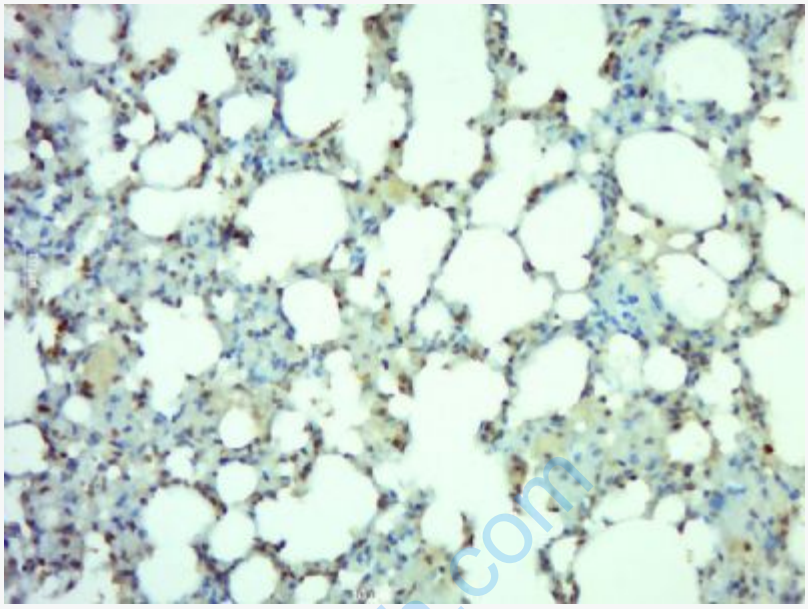
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-NFKB-p65 Polyclonal Antibody, Unconjugated(SL0465R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and

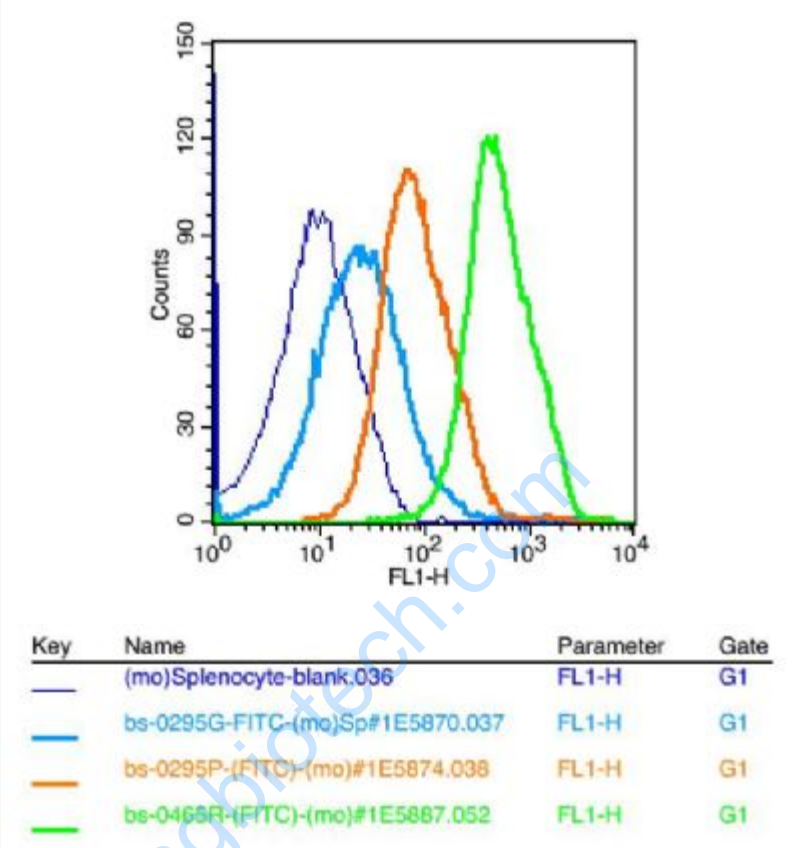
DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Rat bladder); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NFKB p65) Polyclonal Antibody, Unconjugated (SL0465R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NFKB p65) Polyclonal Antibody, Unconjugated (SL0465R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control: mouse splenocytes(blue)

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1µl in 100 µL1X PBS containing 0.5% BSA(green).