

## ARG51651 anti-IKB alpha phospho (Ser32 / Ser36) antibody

Package: 100 µl, 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes IKB alpha phospho (Ser32 / Ser36)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	IKB alpha
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 32/36 (H-D-S(p)-G-L-D-S(p)-M-K) derived from Human IκB-α.
Conjugation	Un-conjugated
Alternate Names	NFKBI; I-kappa-B-alpha; IκB-alpha; NF-kappa-B inhibitor alpha; Major histocompatibility complex enhancer-binding protein MAD3; IKBA; IkappaBalpha; MAD-3

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

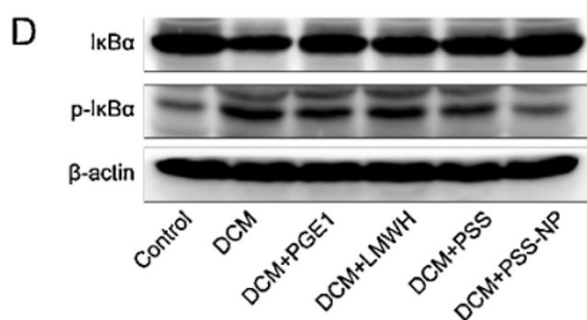
and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	NFKBIA
Gene Full Name	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha
Background	Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription.
Function	Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription. [UniProt]
Highlight	Related Antibody Duos and Panels: <a href="#">ARG30037 Phospho IKB alpha Antibody Duo (Total, pS32/36)</a> <a href="#">ARG30205 NFkB Activation Antibody Panel</a> Related products: <a href="#">IKB alpha antibodies</a> ; <a href="#">IKB alpha Duos / Panels</a> ; <a href="#">Anti-Rabbit IgG secondary antibodies</a> ; Related news: <a href="#">Treatment of Obesity with Celastrol</a> <a href="#">Tumor microenvironments are shown to affect progression of several cancer subtypes</a> <a href="#">Immune signaling protein TLR4 has opposing roles in breast cancer development</a>
Research Area	Cancer antibody; Gene Regulation antibody; Immune System antibody; Signaling Transduction antibody; Ikb alpha degradation Study antibody; NF-kB Activation Study antibody
Calculated Mw	36 kDa
PTM	Phosphorylated; disables inhibition of NF-kappa-B DNA-binding activity. Phosphorylation at positions 32 and 36 is prerequisite to recognition by UBE2D3 leading to polyubiquitination and subsequent degradation. Sumoylated; sumoylation requires the presence of the nuclear import signal. Sumoylation blocks ubiquitination and proteasome-mediated degradation of the protein thereby increasing the protein stability. Monoubiquitinated at Lys-21 and/or Lys-22 by UBE2D3. Ubiquitin chain elongation is then performed by CDC34 in cooperation with the SCF(FBXW11) E3 ligase complex, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. The resulting polyubiquitination leads to protein degradation. Also ubiquitinated by SCF(BTRC) following stimulus-dependent phosphorylation at Ser-32 and Ser-36. Deubiquitinated by porcine reproductive and respiratory syndrome virus Nsp2 protein, which thereby interferes with NFKBIA degradation and impairs subsequent NF-kappa-B activation.

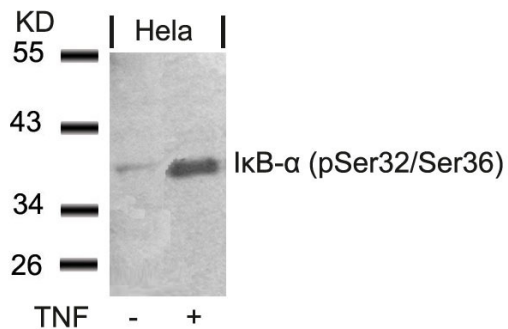
## Images



ARG51651 anti-IKB alpha phospho (Ser32 / Ser36) antibody WB image

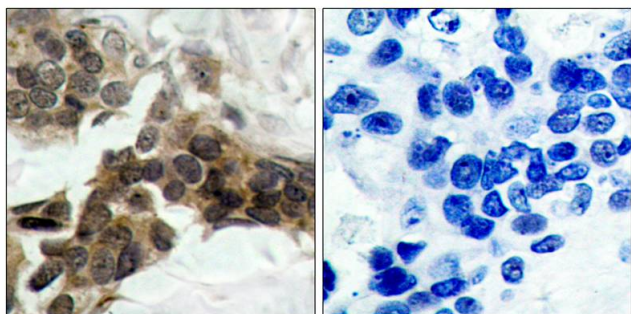
Western blot: Rat cardiac stained with ARG51651 anti-IKB alpha phospho (Ser32 / Ser36) antibody at dilution.

From Yongjun Mao et al. Biomed Pharmacother. (2020), [doi: 10.1016/j.biopha.2019.109280](https://doi.org/10.1016/j.biopha.2019.109280), Fig. 6D.



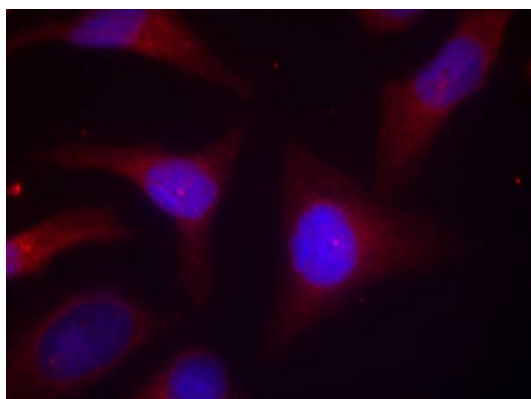
ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody WB image

Western blot: Extracts from HeLa cells untreated or treated with TNF stained with ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody.



ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51651 anti-IκB alpha phospho (Ser32 / Ser36) antibody.