

Rabbit Anti-phospho-IKB alpha (Ser32 + Ser36) antibody

SL2513R

Product Name:	phospho-IKB alpha (Ser32 + Ser36)
Chinese Name:	磷酸化p-IκB-α抗体
Alias:	IKB alpha (phospho S32 + S36); p-IKB alpha (phospho S32 + S36); NFKBIA(phospho S32/S36); phospho-NFKBIA (Ser32/36); phospho-NFKBIA (Ser32 + Ser36); IKB alpha; Inhibitor of KB alpha; I kappa B alpha; I(Kappa)B(alpha); IkappaBalpha; IKBA; IKBalpha; MAD 3; MAD3; Major histocompatibility complex enhancer binding protein MAD3; NF kappa B inhibitor alpha; NFKBI; NFKBIA; Nuclear factor of kappa light chain gene enhancer in B cells; Nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor alpha; IKBA HUMAN.
	Specific References(2) SL2513R has been referenced in 2 publications.
	[IF=2.08]Fu, Juanli, et al. "Tetrachlorobenzoquinone exhibits neurotoxicity by inducing
	inflammatory responses through ROS-mediated IKK/IκB/NF-κB
文献引用	signaling."Environmental Toxicology and Pharmacology (2016).WB;Rat.
Pub	PubMed:26745386
:	[IF=3.97]Li, Xue-Nan, et al. "Lycopene mitigates atrazine-induced cardiac
	inflammation via blocking the NF-κB pathway and NO production." Journal of
	Functional Foods 29 (2017): 208-216. WB; Mouse.
	PubMed:0
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections
	need antigen repair)

not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.
35kDa
The nucleuscytoplasmic
Lyophilized or Liquid
lmg/ml
KLH conjugated Synthesised phosphopeptide derived from human IKB alpha around the phosphorylation site of Ser32/36:HD(p-S)GLD(p-S)M
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
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
This gene encodes a member of the NF-kappa-B inhibitor family, which contain multiple ankrin repeat domains. The encoded protein interacts with REL dimers to inhibit NF-kappa-B/REL complexes which are involved in inflammatory responses. The encoded protein moves between the cytoplasm and the nucleus via a nuclear localization signal and CRM1-mediated nuclear export. Mutations in this gene have been found in ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant disease. [provided by RefSeq, Aug 2011]. 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.
Interacts with RELA; the interaction requires the nuclear import signal. Interacts with NKIRAS1 and NKIRAS2. Part of a 70-90 kDa complex at least consisting of CHUK, IKBKB, NFKBIA, RELA, IKBKAP and MAP3K14. Interacts with HBV protein X. Interacts with RWDD3; the interaction enhances sumoylation. Interacts (when phosphorylated at the 2 serine residues in the destruction motif D-S-G-X(2,3,4)-S) with BTRC. Associates with the SCF(BTRC) complex, composed of SKP1, CUL1 and BTRC; the association is mediated via interaction with BTRC. Part of a SCF(BTRC)-like complex lacking CUL1, which is associated with RELA; RELA interacts directly with NFKBIA. Interacts with PRMT2. Interacts with PRKACA in platelets; this interaction is disrupted by thrombin and collagen. Interacts with HIF1AN. Subcellular Location: Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

Post-translational modifications:

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. 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.

DISEASE:

Defects in NFKBIA are the cause of ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant (ADEDAID) [MIM:612132]. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. ADEDAID is an ectodermal dysplasia associated with decreased production of pro-inflammatory cytokines and certain interferons, rendering patients susceptible to infection.

Similarity:

Belongs to the NF-kappa-B inhibitor family. Contains 5 ANK repeats.

SWISS:

P25963

Gene ID:

4792

Database links:

Entrez Gene: 4792Human

Entrez Gene: 18035Mouse

Entrez Gene: 25493Rat

Omim: 164008Human

SwissProt: P25963Human

SwissProt: Q9Z1E3Mouse

SwissProt: Q63746Rat

Unigene: 81328Human

Unigene: 170515 Mouse

Unigene: 12550Rat

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)