

ARG65746 anti-IKK alpha antibody

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

Summary

Product Description	Rabbit Polyclonal antibody recognizes IKK alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	IKK alpha
Antigen Species	Human
Immunogen	Synthetic peptide of Human IKK alpha.
Conjugation	Un-conjugated
Alternate Names	Conserved helix-loop-helix ubiquitous kinase; IKK-A; TCF16; IKK1; Inhibitor of nuclear factor kappa-B kinase subunit alpha; I-kappa-B kinase 1; IkappaB kinase; Transcription factor 16; EC 2.7.11.10; Nuclear factor NF-kappa-B inhibitor kinase alpha; Ikbka; IKBKA; IKK-alpha; NFKBIKA; IKKA; TCF-16; I-kappa-B kinase alpha

Application Instructions

Application table	Application	Dilution
	FACS	1:20
	ICC/IF	1:100
	IHC-P	1:20 - 1:100
	WB	1:2000 - 1:10000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	H1299 and HeLa	
Calculated Mw	85 kDa	
Observed Size	~ 87 kDa	

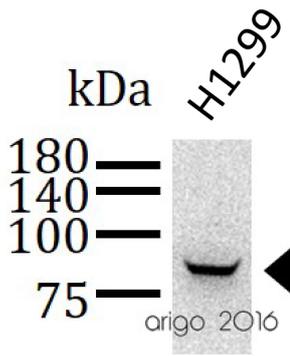
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	50 nM Tris-Glycine (pH 7.4), 0.15 M NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide

Stabilizer	40% Glycerol and 0.05% BSA
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

Database links	GeneID: 1147 Human Swiss-port # O15111 Human
Gene Symbol	CHUK
Gene Full Name	conserved helix-loop-helix ubiquitous kinase
Background	This gene encodes a member of the serine/threonine protein kinase family. The encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the ubiquitination pathway, thereby activating the transcription factor. [provided by RefSeq, Jul 2008]
Function	Serine kinase that plays an essential role in the NF-kappa-B signaling pathway which is activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA damages or other cellular stresses. Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B on serine residues. These modifications allow polyubiquitination of the inhibitors and subsequent degradation by the proteasome. In turn, free NF-kappa-B is translocated into the nucleus and activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis. Negatively regulates the pathway by phosphorylating the scaffold protein TAXBP1 and thus promoting the assembly of the A20/TNFAIP3 ubiquitin-editing complex (composed of A20/TNFAIP3, TAX1BP1, and the E3 ligases ITCH and RNF11). Therefore, CHUK plays a key role in the negative feedback of NF-kappa-B canonical signaling to limit inflammatory gene activation. As part of the non-canonical pathway of NF-kappa-B activation, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. In turn, these complexes regulate genes encoding molecules involved in B-cell survival and lymphoid organogenesis. Participates also in the negative feedback of the non-canonical NF-kappa-B signaling pathway by phosphorylating and destabilizing MAP3K14/NIK. Within the nucleus, phosphorylates CREBBP and consequently increases both its transcriptional and histone acetyltransferase activities. Modulates chromatin accessibility at NF-kappa-B-responsive promoters by phosphorylating histones H3 at 'Ser-10' that are subsequently acetylated at 'Lys-14' by CREBBP. Additionally, phosphorylates the CREBBP-interacting protein NCOA3. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody; Immune System antibody; Signaling Transduction antibody; IκB alpha degradation Study antibody



ARG65746 anti-IKK alpha antibody WB image

Western blot: 30 µg of H1299 cell lysates stained with ARG65746 anti-IKK alpha antibody at 1:500 dilution.



ARG65746 anti-IKK alpha antibody WB image

Western blot: HeLa cell lysate stained with ARG65746 anti-IKK alpha antibody at 1:1000 dilution.