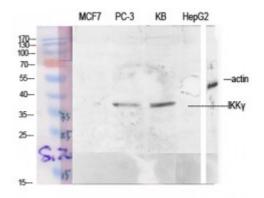


Anti-IK gamma antibody





Description	Rabbit polyclonal to	IKKgamma.
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Model STJ93672

Host Rabbit

Reactivity Human

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human IKKgamma around the non-

phosphorylation site of S85.

Immunogen Region 30-110 aa

Gene ID <u>8517</u>

Gene Symbol <u>IKBKG</u>

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity IKKgamma Polyclonal Antibody detects endogenous levels of IKKgamma

protein.

Tissue Specificity Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name NF-kappa-B essential modulator NEMO FIP-3 IkB kinase-associated protein

1 IKKAP1 Inhibitor of nuclear factor kappa-B kinase subunit gamma I-kappa-

B kinase subunit gamma IKK-gamma IKKG IkB kinase subuni

Molecular Weight 43 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:5961OMIM:300248

Alternative Names NF-kappa-B essential modulator NEMO FIP-3 IkB kinase-associated protein

1 IKKAP1 Inhibitor of nuclear factor kappa-B kinase subunit gamma I-kappa-

B kinase subunit gamma IKK-gamma IKKG IkB kinase subuni

Function Regulatory subunit of the IKK core complex which phosphorylates inhibitors

of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. Its binding to scaffolding polyubiquitin seems to play a role in IKK activation by multiple signaling receptor pathways. However, the specific type of polyubiquitin

recognized upon cell stimulation (either 'Lys-63'-linked or linear

polyubiquitin) and its functional importance is reported conflictingly. Also considered to be a mediator for TAX activation of NF-kappa-B. Could be implicated in NF-kappa-B-mediated protection from cytokine toxicity.

Essential for viral activation of IRF3. Involved in TLR3- and IFIH1-mediated

antiviral innate response; this function requires 'Lys-27'-linked

polyubiquitination.

Sequence and Domain Family The leucine-zipper domain and the CCHC NOA-type zinc-finger are essential

for polyubiquitin binding and for the activation of IRF3.

Cellular Localization Cytoplasm Nucleus. Sumoylated NEMO accumulates in the nucleus in

response to genotoxic stress.

Post-translational Phosphorylation at Ser-68 attenuates aminoterminal homodimerization. **Modifications** Polyubiquitinated on Lys-285 through 'Lys-63'; the ubiquitination is med

Polyubiquitinated on Lys-285 through 'Lys-63'; the ubiquitination is mediated by NOD2 and RIPK2 and probably plays a role in signaling by facilitating interactions with ubiquitin domain-containing proteins and activates the NF-kappa-B pathway. Polyubiquitinated on Lys-399 through 'Lys-63'; the ubiquitination is mediated by BCL10, MALT1 and TRAF6 and probably plays a role in signaling by facilitating interactions with ubiquitin domain-

containing proteins and activates the NF-kappa-B pathway.

Monoubiquitinated on Lys-277 and Lys-309; promotes nuclear export. Polyubiquitinated through 'Lys-27' by TRIM23; involved in antiviral innate and inflammatory responses. Linear polyubiquitinated on Lys-111, Lys-143, Lys-226, Lys-246, Lys-264, Lys-277, Lys-285, Lys-292, Lys-302, Lys-309 and Lys-326; the head-to-tail polyubiquitination is mediated by the LUBAC complex and plays a key role in NF-kappa-B activation. Polyubiquitinated on Lys-309 and Lys-321 via 'Lys-27'-linked ubiquitin by Shigella flexneri E3 ubiquitin-protein ligase ipah9.8, leading to its degradation by the proteasome. Deubiquitinated by USP10 in a TANK-dependent and -independent manner, leading to the negative regulation of NF-kappaB signaling upon DNA damage . Sumoylated on Lys-277 and Lys-309 with SUMO1; the modification results

in phosphorylation of Ser-85 by ATM leading to a replacement of the sumoylation by mono-ubiquitination on these residues. Neddylated by TRIM40, resulting in stabilization of NFKBIA and down-regulation of NF-kappa-B activity.

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