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IKBKG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18224a

Product Information

Application	WB, E
Primary Accession	Q9Y6K9
Other Accession	NP_001093326.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33624
Calculated MW	48198
Antigen Region	1-30

Additional Information

Gene ID	8517
Other 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 subunit gamma, NF-kappa-B essential modifier, IKBKG, FIP3, NEMO
Target/Specificity	This IKBKG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human IKBKG.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IKBKG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IKBKG (HGNC:5961)
Synonyms	FIP3, NEMO

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 (PubMed:14695475, PubMed:20724660, PubMed:21518757, PubMed:9751060). Its binding to scaffolding polyubiquitin plays a key role in IKK activation by multiple signaling receptor pathways (PubMed:16547522, PubMed:18287044, PubMed:19033441, PubMed:19185524, PubMed:21606507, PubMed:27777308, PubMed:33567255). Can recognize and bind both 'Lys-63'-linked and linear polyubiquitin upon cell stimulation, with a much higher affinity for linear polyubiquitin (PubMed:16547522, PubMed:18287044, PubMed:19033441, PubMed:19185524, PubMed:21606507, PubMed:27777308). Could be implicated in NF-kappa-B-mediated protection from cytokine toxicity. Essential for viral activation of IRF3 (PubMed:19854139). Involved in TLR3- and IFIH1-mediated antiviral innate response; this function requires 'Lys- 27'-linked polyubiquitination (PubMed:20724660).
Cellular Location	Cytoplasm. Nucleus Note=Sumoylated NEMO accumulates in the nucleus in response to genotoxic stress.
Tissue Location	Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

Background

This gene encodes the regulatory subunit of the inhibitor of kappaB kinase (IKK) complex, which activates NF-kappaB resulting in activation of genes involved in inflammation, immunity, cell survival, and other pathways. Mutations in this gene result in incontinentia pigmenti, hypohidrotic ectodermal dysplasia, and several other types of immunodeficiencies. Multiple transcript variants encoding different isoforms have been found for this gene. A pseudogene highly similar to this locus is located in an adjacent region of the X chromosome.

References

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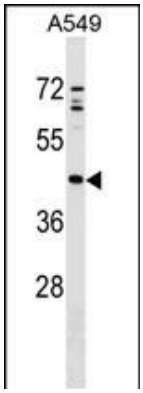
Wu, Z.H., et al. Mol. Cell 40(1):75-86(2010)
Arimoto, K., et al. Proc. Natl. Acad. Sci. U.S.A. 107(36):15856-15861(2010)
Gautheron, J., et al. Hum. Mol. Genet. 19(16):3138-3149(2010)
Mooster, J.L., et al. J. Allergy Clin. Immunol. 126(1):127-132(2010)

Images



IKBKG Antibody (N-term) (Cat. #AP18224a) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the IKBKG antibody detected the IKBKG protein (arrow).