10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IKK gamma Antibody
Catalog # ASC10121

Specification

IKK gamma Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9Y6K9
Other Accession	AF074382, 3641279
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**52 kDa KDa**
Application Notes	**IKK gamma antibody can be used for detection of IKK gamma by Western blot at 1 µg/mL. A 52 kDa band should be detected. Antibody can also be used for immunocytochemistry starting at 5 µg/mL.**

IKK gamma Antibody - Additional Information

Gene ID **8517**

Other Names
IKK gamma Antibody: IP, IP1, IP2, FIP3, IPD2, NEMO, FIP-3, Fip3p, AMCBX1, ZC2HC9, IKK-gamma, NF-kappa-B essential modulator, inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma

Target/Specificity
IKBKG; IKK gamma has no cross response to IKK alpha or IKK beta.

Reconstitution & Storage
IKK gamma antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
IKK gamma Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IKK gamma Antibody - 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

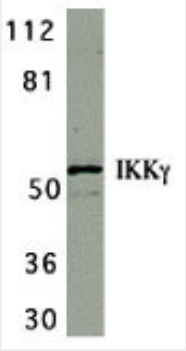
IKK gamma Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

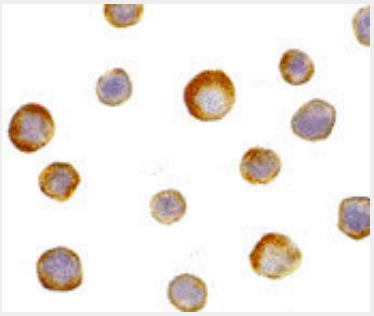
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IKK gamma Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of IKK gamma in HeLa whole cell lysate with IKK gamma antibody at 1 µg/mL.



Immunocytochemistry of IKK gamma in HeLa cells with IKK gamma antibody at 5 µg/mL.

IKK gamma Antibody - Background

IKK gamma Antibody: Nuclear factor kappa B (NF-κB) is a ubiquitous transcription factor and an essential mediator of gene expression during activation of immune and inflammatory responses. NF-κB mediates the expression of a great variety of genes in response to extracellular stimuli. NF-κB is associated with IκB proteins in the cell cytoplasm, which inhibit NF-κB activity. The IκB kinase (IKKα and IKKβ) phosphorylates IkB and mediates NF-κB activation. A novel molecule in the IKK complex was recently identified and termed IKKγ/NEMO/FIP3/IKKAP1. IKKγ interacts with IKKβ and is required for the activation of IKK complex and NF-κB by LPS, PMA, TNF, and IL-1 stimulation. FIP3 was also shown to bind to RIP and NIK and to mediate TNF-induced NF-κB activation.

IKK gamma Antibody - References

Rothwarf DM, Zandi E, Natoli G, Karin M. IKK-γ is an essential regulatory subunit of the IκB kinase complex. Nature 1998;395(6699):297-300
Yamaoka S, Courtois G, Bessia C, Whiteside ST, Weil R, Agou F, Kirk HE, Kay RJ, Israel A. Complementation cloning of NEMO, a component of the IκB kinase complex essential for NF-κB activation. Cell. 1998;93(7):1231-40.
Li Y, Kang J, Friedman J, Tarassishin L, Ye J, Kovalenko A, Wallach D, Horwitz MS. Identification of a cell protein (FIP-3) as a modulator of NF-κB activity and as a target of an adenovirus inhibitor of tumor necrosis factor α-induced apoptosis. Proc Natl Acad Sci U S A 1999;96(3):1042-7
Mercurio F, Murray BW, Shevchenko A, Bennett BL, Young DB, Li JW, Pascual G, Motiwala A, Zhu H, Mann M, Manning AM. IκB kinase (IKK)-associated protein 1, a common component of the heterogeneous IKK complex. Mol Cell Biol. 1999;19(2):1526-38.