ARG54728
anti-IKK gamma antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes IKK gamma
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	55AT986.5.78
Target Name	IKK gamma
Species	Human
Immunogen	Full-length Human IKK gamma protein (NP_001093326.2) tagged with His-tag.
Conjugation	Un-conjugated
Alternate Names	I-kappa-B kinase subunit gamma; IkB kinase-associated protein 1; Fip3p; NF-kappa-B essential modifier; IKK-gamma; IP; NF-kappa-B essential modulator; NEMO; ZC2HC9; AMCBX1; IP2; IKKG; IP1; FIP3; IMD33; IkB kinase subunit gamma; IKKAP1; IPD2; FIP-3; Inhibitor of nuclear factor kappa-B kinase subunit gamma

Application Instructions

Application table

Application	Dilution
WB	1:100 - 1:500

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: ZR75-1

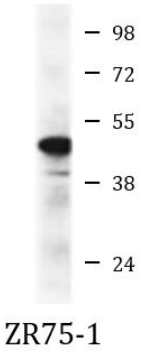
Properties

Purification	Protein G purified
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
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 or below. 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: 8517 Human Swiss-port # Q9Y6K9 Human
Gene Symbol	IKBKG
Gene Full Name	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma
Background	IKK gamma is a 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. A pseudogene highly similar to this locus is located in an adjacent region of the X chromosome. [provided by RefSeq, Mar 2016]
Function	IKK gamma: 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. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Gene Regulation antibody; Immune System antibody; Signaling Transduction antibody
Calculated Mw	48 kDa
PTM	Phosphorylation at Ser-68 attenuates aminoterminal homodimerization. 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 (PubMed:25861989). 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.
Cellular Localization	Cytoplasm. Nucleus. Note=Sumoylated NEMO accumulates in the nucleus in response to genotoxic stress

Images



ARG54728 anti-IKK gamma antibody WB image

Western blot: ZR75-1 cell lysate stained with ARG54728 anti-IKK gamma antibody.