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NIK Antibody

Catalog # ASC10016

Product Information

Application	WB, E
Primary Accession	Q99558
Other Accession	Q99558, 92090612
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	104042
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NIK antibody can be used for detection of NIK by Western blot at 1 - 2 □g/mL.

Additional Information

Gene ID	9020
Other Names	NIK Antibody: HS, NIK, HSNIK, FTDCR1B, Mitogen-activated protein kinase kinase kinase 14, NF-kappa-beta-inducing kinase, HsNIK, mitogen-activated protein kinase kinase kinase 14
Target/Specificity	MAP3K14;
Reconstitution & Storage	NIK 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	NIK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAP3K14 (HGNC:6853)
Function	Lymphotoxin beta-activated kinase which seems to be exclusively involved in the activation of NF-kappa-B and its transcriptional activity. Phosphorylates CHUK/IKKA, thereby promoting proteolytic processing of NFKB2/P100, which leads to NF-kappa-B activation via the non-canonical pathway (PubMed:25406581, PubMed:29230214). Has an essential role in the non-canonical NF-kappa-B signaling that regulates genes encoding molecules involved in B-cell survival, lymphoid organogenesis, and immune response (PubMed:25406581). Could act in a receptor-selective manner.
Cellular Location	Cytoplasm.

Tissue Location	Weakly expressed in testis, small intestine, spleen, thymus, peripheral blood leukocytes, prostate, ovary and colon

Background

NIK 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 including IL-1, TNFα, LPS and mitogens. A serine/threonine protein kinase which mediates NF-κB activation by IL-1, TNFα and CD95 was identified recently and designated NIK (for NF-κB inducing kinase). NIK is an activator of IκB kinase alpha and beta (IKKα and IKKβ). Therefore, NIK is a key molecule in the NF-κB signaling pathway leading to the induction of a variety of gene expression in response to proinflammatory cytokines and bacteria products.

References

Malinin NL, Boldin MP, Kovalenko AV, et al. MAP3K-related kinase involved in NF-κB induction by TNF, CD95 and IL-1. Nature 1997; 385:540-4.
Regnier CH, Song HY, Gao X, et al. Identification and characterization of an IκB kinase. Cell 1997; 90:373-83.
Woronicz JD, Gao X, Cao Z, et al. IκB kinase-β: NF-κB activation and complex formation with IκB kinase-α and NIK. Science 1997; 278:866-9.
Ling L, Cao Z, and Goeddel D. NF-κB-inducing kinase activates IKK-α by phosphorylation of Ser-176. Proc. Natl. Acad. Sci. USA 1998; 95:3792-7.