

NIK ANTIBODY

NIK (CT):

CATALOG NO.: 1129

BACKGROUND:

Nuclear factor kappa B (NF- κ B) is a ubiquitous transcription factor and an essential mediator of gene expression during activation of immune and inflammatory responses. NF- κ B mediates the expression of a great variety of genes in response to extracellular stimuli including IL-1, TNF α , LPS and mitogens. A serine/threonine protein kinase which mediates NF- κ B activation by IL-1, TNF α and CD95 was identified recently and designated NIK (for NF- κ B inducing kinase) (1). NIK is an activator of I κ B kinase alpha and beta (IKK α and IKK β) (2-5). Therefore, NIK is a key molecule in the NF- κ B signaling pathway leading to the induction of a variety of gene expression in response to proinflammatory cytokines and bacteria products.

SOURCE:

Rabbit polyclonal NIK antibody was raised against a peptide corresponding to amino acids 931 to 947 of human NIK (1).

APPLICATION:

NIK antibody can be used for detection of NIK by Western blot. (Optimal dilution should be determined by user.) 293 cell lysate can be used as positive control. **For research use only.**

STORAGE:

NIK antibody is supplied as purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

RELATED PRODUCT:

Blocking peptide, 50 μ g/200 μ l, is available for competition studies (Catalog No. 1129P).

293 Cell Lysate, 100 μ g at 2 mg/ml, is available for positive control (Catalog No. 1210).

REFERENCES:

1. Malinin NL, Boldin MP, Kovalenko AV, Wallach . MAP3K-related kinase involved in NF-kappaB induction by TNF, CD95 and IL-1. *Nature* 1997;385:540-544
2. Regnier CH, Song HY, Gao X, Goeddel DV, Cao Z, Rothe M. Identification and characterization of an IkappaB kinase. *Cell* 1997;90:373-383
3. Woronicz JD, Gao X, Cao Z, Rothe M, Goeddel DV. IkappaB kinase-beta: NF-kappaB activation and complex formation with IkappaB kinase-alpha and NIK. *Science* 1997;278:866-869
4. Ling L, Cao Z, Goeddel D. NF-kappaB-inducing kinase activates IKK-alpha by phosphorylation of Ser-176. *Proc Natl Acad Sci USA* 1998;95:3792-3797
5. Nakano H, Shindo M, Sakon S, Nishinaka S, Mihara M, Yagita H, Okumura K. Differential regulation of IkappaB kinase alpha and beta by two upstream kinases, NF-kappaB-inducing kinase and mitogen-activated protein kinase/ERK kinase-1. *Proc Natl Acad Sci USA* 1998;95:3537-3542 (RD0400) (06-02D)