

**NIK Antibody**  
Catalog # ASC10016**Specification****NIK Antibody - Product Information**

Application	ICC, IF
Primary Accession	<a href="#">Q99558</a>
Other Accession	<a href="#">Q99558</a> , <a href="#">9020</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 104 kDa KDa
Application Notes	NIK antibody can be used for detection of NIK by Western blot at 1 - 2 µg/mL.

**NIK Antibody - 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**

NIK antibody was raised against a 17 amino acid peptide near the carboxy terminus of human NIK. The immunogen is located within the last 50 amino acids of NIK.

**Reconstitution & Storage**

NIK antibody can be stored at 4°C for three months and -20°C, 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.

**NIK Antibody - 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](http://www.uniprot.org/citations/25406581) target="\_blank">25406581</a>, PubMed: [29230214](http://www.uniprot.org/citations/29230214) target="\_blank">29230214</a>). 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](http://www.uniprot.org/citations/25406581))

target="\_blank">25406581</a>). Could act in a receptor-selective manner.

#### Cellular Location

Cytoplasm.

#### Tissue Location

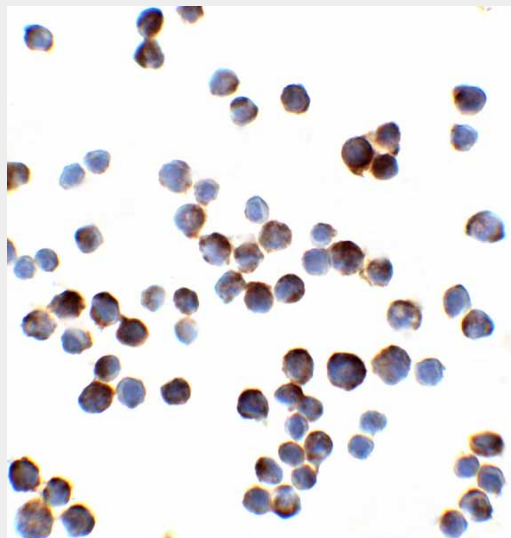
Weakly expressed in testis, small intestine, spleen, thymus, peripheral blood leukocytes, prostate, ovary and colon

#### NIK Antibody - Protocols

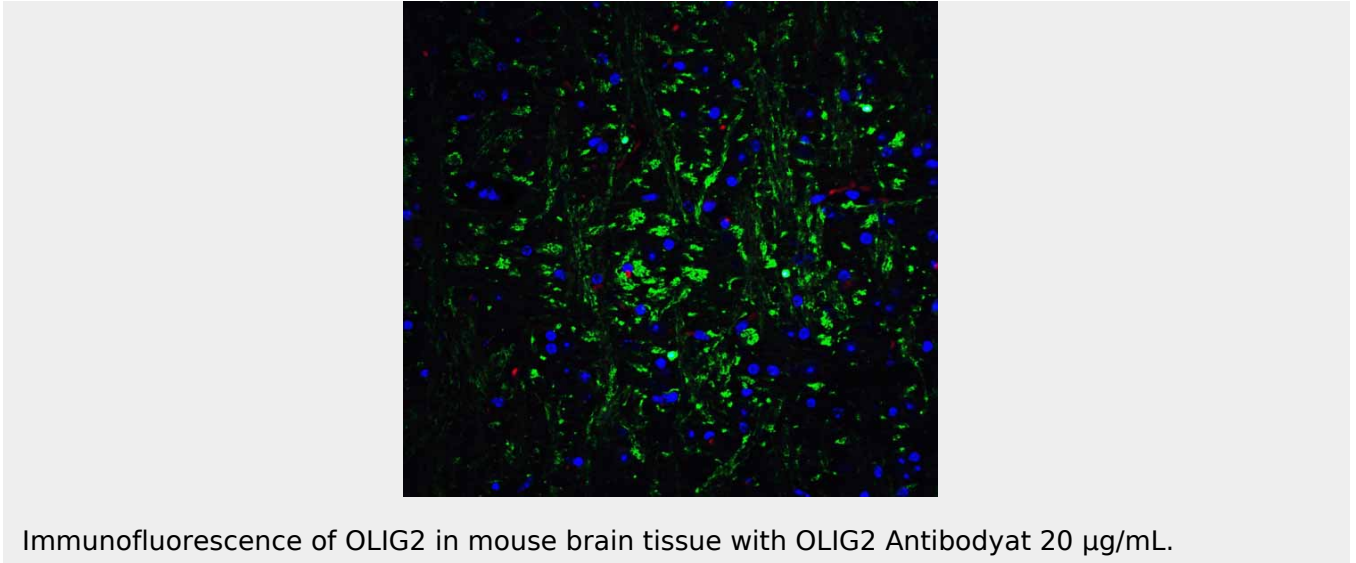
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### NIK Antibody - Images



Immunocytochemistry of IL-1RAcP in HeLa cells with IL-1RAcP antibody at 2 µg/ml.



### **NIK Antibody - Background**

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

### **NIK Antibody - References**

- Malinin NL, Boldin MP, Kovalenko AV, et al. MAP3K-related kinase involved in NF- $\kappa$ B 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 I $\kappa$ B kinase. *Cell* 1997; 90:373-83.
- Woronicz JD, Gao X, Cao Z, et al. I $\kappa$ B kinase- $\beta$ : NF- $\kappa$ B activation and complex formation with I $\kappa$ B kinase- $\alpha$  and NIK. *Science* 1997; 278:866-9.
- Ling L, Cao Z, and Goeddel D. NF- $\kappa$ B-inducing kinase activates IKK- $\alpha$  by phosphorylation of Ser-176. *Proc. Natl. Acad. Sci. USA* 1998; 95:3792-7.