

### NIK Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8004a

## **Specification**

## NIK Antibody (C-term) - Product Information

Application WB,E
Primary Accession O95819
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 618-649

## NIK Antibody (C-term) - Additional Information

#### **Gene ID 9448**

#### **Other Names**

Mitogen-activated protein kinase kinase kinase kinase 4, HPK/GCK-like kinase HGK, MAPK/ERK kinase kinase 4, MEK kinase kinase 4, MEKKK 4, Nck-interacting kinase, MAP4K4, HGK, KIAA0687, NIK

### Target/Specificity

This NIK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 618-649 amino acids from the C-terminal region of human NIK.

# **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

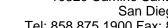
NIK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## NIK Antibody (C-term) - Protein Information

Name MAP4K4 (<u>HGNC:6866</u>)

Synonyms HGK, KIAA0687, NIK







Function Serine/threonine kinase that plays a role in the response to environmental stress and cytokines such as TNF-alpha. Appears to act upstream of the JUN N-terminal pathway (PubMed: 9890973). Activator of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. MAP4Ks act in parallel to and are partially redundant with STK3/MST2 and STK4/MST2 in the phosphorylation and activation of LATS1/2, and establish MAP4Ks as components of the expanded Hippo pathway (PubMed: 26437443). Phosphorylates SMAD1 on Thr- 322 (PubMed: 21690388).

## **Cellular Location** Cytoplasm.

### **Tissue Location**

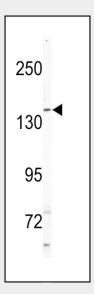
Widely expressed. Isoform 5 is abundant in the brain. Isoform 4 is predominant in the liver, skeletal muscle and placenta.

## NIK Antibody (C-term) - 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

## NIK Antibody (C-term) - Images



Western blot analysis of anti-HGK Antibody (C-term)(Cat.#AP8004a) in jurkat cell line lysates (35ug/lane). HGK(arrow) was detected using the purified Pab.

# NIK Antibody (C-term) - Background

HGK, a member of the STE20 subfamily of Ser/Thr protein kinases, may play a role in the response to environmental stress and cytokines such as TNF-alpha. It appears to act upstream of the JUN



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N-terminal pathway. This protein is thought to interact with the SH3 domain of the adapter proteins Nck. HGK binds, via its CNH regulatory domain, to the N-terminal region of SPG3A. Expression appears to be ubiquitous, expressed in all tissue types examined. Isoform 5 appears to be more abundant in the brain, and isoform 4 is predominant in the liver, skeletal muscle and placenta.

## NIK Antibody (C-term) - References

Wright, J.H., et al., Mol. Cell. Biol. 23(6):2068-2082 (2003). Yao, Z., et al., J. Biol. Chem. 274(4):2118-2125 (1999). Ishikawa, K., et al., DNA Res. 5(3):169-176 (1998).

## NIK Antibody (C-term) - Citations

- Canonical nuclear factor κB pathway links tumorigenesis of synchronous mantle-cell lymphoma, clear-cell renal-cell carcinoma, and GI stromal tumor.
- Inflexibility in intramuscular triglyceride fractional synthesis distinguishes prediabetes from obesity in humans.
- siRNA-mediated reduction of inhibitor of nuclear factor-kappaB kinase prevents tumor necrosis factor-alpha-induced insulin resistance in human skeletal muscle.
- MAP4K4 gene silencing in human skeletal muscle prevents tumor necrosis factor-alpha-induced insulin resistance.