

## Phospho-TNIK(\$764) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3276A

## **Specification**

## Phospho-TNIK(\$764) Antibody - Product Information

Application IHC-P, DB,E
Primary Accession Q9UKE5
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

# Phospho-TNIK(\$764) Antibody - Additional Information

**Gene ID 23043** 

#### **Other Names**

TRAF2 and NCK-interacting protein kinase, TNIK, KIAA0551

## Target/Specificity

This TNIK Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S764 of human TNIK.

## **Dilution**

IHC-P~~1:50~100 DB~~1:500

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **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**

Phospho-TNIK(S764) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Phospho-TNIK(S764) Antibody - Protein Information

#### Name TNIK

#### Synonyms KIAA0551

**Function** Serine/threonine kinase that acts as an essential activator of the Wnt signaling pathway. Recruited to promoters of Wnt target genes and required to activate their expression. May act by





phosphorylating TCF4/TCF7L2. Appears to act upstream of the JUN N- terminal pathway. May play a role in the response to environmental stress. Part of a signaling complex composed of NEDD4, RAP2A and TNIK which regulates neuronal dendrite extension and arborization during development. More generally, it may play a role in cytoskeletal rearrangements and regulate cell spreading. Phosphorylates SMAD1 on Thr-322.

#### **Cellular Location**

Nucleus. Cytoplasm. Recycling endosome. Cytoplasm, cytoskeleton. Note=Associated with recycling endosomes and the cytoskeletal fraction upon RAP2A overexpression

#### **Tissue Location**

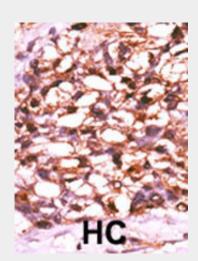
Expressed ubiquitously. Highest levels observed in heart, brain and skeletal muscle. Expressed in normal colonic epithelia and colorectal cancer tissues.

## Phospho-TNIK(\$764) Antibody - Protocols

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

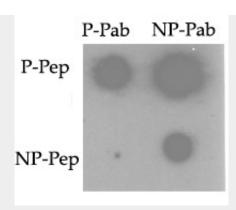
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Phospho-TNIK(S764) Antibody - Images



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.





Dot blot analysis of Phospho-TNIK-pS764 Pab (Cat. #AP3276a) and TNIK-pS764 Pab (AP7970d) on nitrocellulose membrane. 50ng of Phospho-peptide (BP3276a) or Non Phospho-peptide (BP7970d) per dot were adsorbed. Antobodies working concentration was 0.5ug per ml. P-Pab: phosphorylated antibody; NP-Pab: non-phophorylated antibody; P-Pep: phospho-peptide; NP-Pep: non-phospho-peptide.

# Phospho-TNIK(\$764) Antibody - Background

TNIK is a stress-activated serine/threonine kinase that may play a role in the response to environmental stress. This protein appears to act upstream of the JUN N-terminal pathway, and may play a role in cytoskeletal regulation.

# Phospho-TNIK(\$764) Antibody - References

Taira, K., et al., J. Biol. Chem. 279(47):49488-49496 (2004). Fu, C.A., et al., J. Biol. Chem. 274(43):30729-30737 (1999). Yonekura, H., et al., Nucleic Acids Res. 27(13):2591-2600 (1999).

## Phospho-TNIK(S764) Antibody - Citations

- <u>Characterization of the ERG-regulated Kinome in Prostate Cancer Identifies TNIK as a Potential Therapeutic Target.</u>
- The psychiatric disease risk factors DISC1 and TNIK interact to regulate synapse composition and function.