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TNIK Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7970a

Specification

TNIK Antibody (N-term) - Product Information

Application	**IHC-P,E**
Primary Accession	Q9UKE5
Other Accession	P83510
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

TNIK Antibody (N-term) - 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 peptide between 1-30 amino acids from the N-terminal region of human TNIK.

Dilution
IHC-P~~1:50~100

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

TNIK Antibody (N-term) - Protein Information

Name TNIK (HGNC:30765)

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. 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).

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

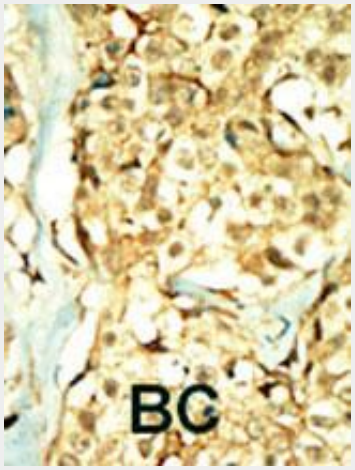
Tissue Location
Expressed ubiquitously. Highest levels observed in heart, brain and skeletal muscle. Expressed in normal colonic epithelia and colorectal cancer tissues.

TNIK Antibody (N-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

TNIK Antibody (N-term) - Images



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

TNIK Antibody (N-term) - Background

Germinal center kinases (GCKs), such as TNIK, are characterized by an N-terminal kinase domain and a C-terminal GCK domain that serves a regulatory function (Fu et al., 1999 [PubMed 10521462]).[supplied by OMIM]

TNIK Antibody (N-term) - References

Blume-Jensen P, et al. Nature 2001. 411: 355.
Cantrell D, J. Cell Sci. 2001. 114: 1439.
Jhiang S Oncogene 2000. 19: 5590.
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Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.
Robertson, S. et al. Trends Genet. 2000. 16: 368.
Robinson D, et al. Oncogene 2000. 19: 5548.
Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889.
Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561.
Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.

TNIK Antibody (N-term) - Citations

- TNIK serves as a novel biomarker associated with poor prognosis in patients with pancreatic cancer.
- The psychiatric disease risk factors DISC1 and TNIK interact to regulate synapse composition and function.