

**TNIK Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10902**

**Specification**

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**TNIK Antibody (Internal) - Product Information**

Application	IHC
Primary Accession	<a href="#">O9UKE5</a>
Reactivity	Human, Mouse, Rabbit, Hamster, Monkey, Chicken, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	155kDa KDa

**TNIK Antibody (Internal) - Additional Information**

**Gene ID** 23043

**Other Names**

TRAF2 and NCK-interacting protein kinase, 2.7.11.1, TNIK, KIAA0551

**Target/Specificity**

Human TNIK. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

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

**TNIK Antibody (Internal) - 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:<a href="http://www.uniprot.org/citations/26437443" target="\_blank">26437443</a>).

#### 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.

#### Volume

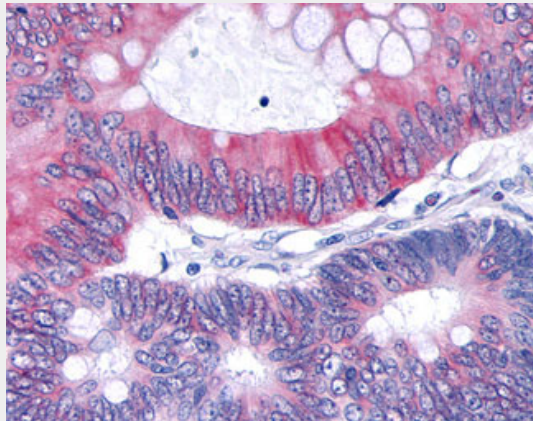
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### TNIK Antibody (Internal) - Protocols

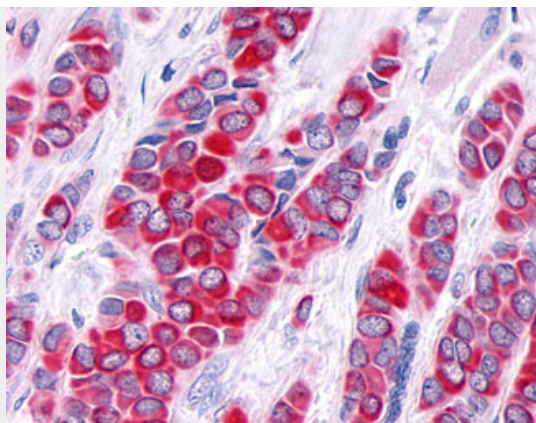
Provided below are standard protocols that you may find useful for product applications.

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

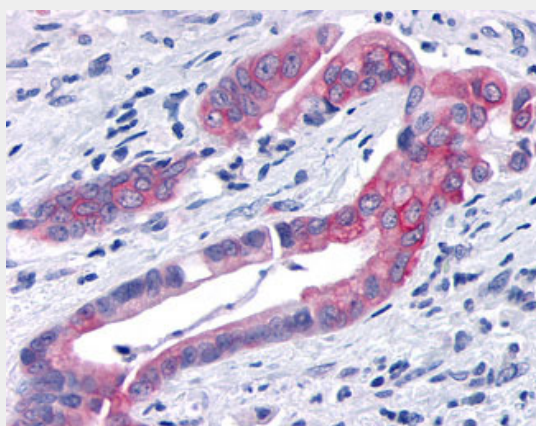
### TNIK Antibody (Internal) - Images



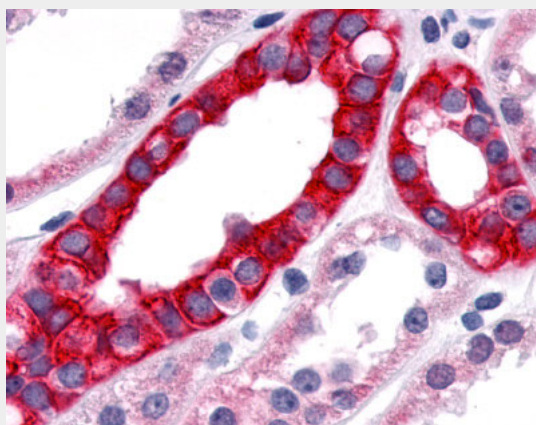
Anti-TNIK antibody IHC of human Colon, Carcinoma.



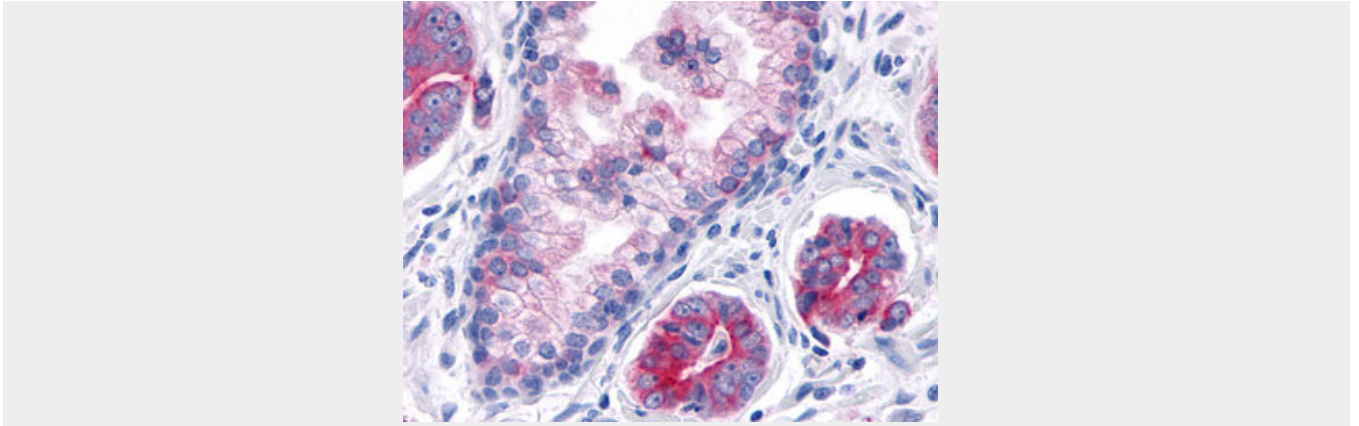
Anti-TNIK antibody IHC of human Breast, Carcinoma.



Anti-TNIK antibody IHC of human Pancreas, Carcinoma.



Anti-TNIK antibody ALS10902 IHC of human kidney.



Anti-TNIK antibody IHC of human Prostate, Carcinoma.

#### **TNIK Antibody (Internal) - Background**

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.

#### **TNIK Antibody (Internal) - References**

- Fu C.A.,et al.J. Biol. Chem. 274:30729-30737(1999).
- Nagase T.,et al.DNA Res. 5:31-39(1998).
- Nakajima D.,et al.DNA Res. 9:99-106(2002).
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Muzny D.M.,et al.Nature 440:1194-1198(2006).