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TNIK Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7970a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UKE5
Other Accession	P83510
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	154943
Antigen Region	1-30

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	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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.

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.

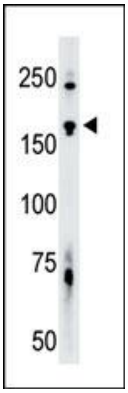
Background

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]

References

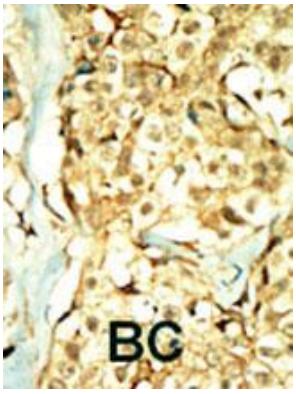
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Images

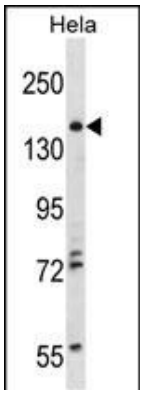


The anti-TNIK Pab (Cat. #AP7970a) is used in Western blot to detect TNIK in mouse brain tissue lysate.

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 (M1) (Cat. #AP7970a) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the TNIK antibody detected the TNIK protein (arrow).

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.