

TNK1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7722c

Product Information

Application WB, IHC-P, E Primary Accession Q13470

Other Accession 099ML2, 095364

Reactivity Human **Predicted** Mouse Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names RB3104** 72468 **Calculated MW Antigen Region** 256-286

Additional Information

Gene ID 8711

Other Names Non-receptor tyrosine-protein kinase TNK1, CD38 negative kinase 1, TNK1

{ECO:0000312|EMBL:AAC994121}

Target/Specificity This TNK1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 256-286 amino acids from the Central

region of human TNK1.

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.

PrecautionsTNK1 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name TNK1 {ECO:0000312 | EMBL:AAC99412.1}

Function Involved in negative regulation of cell growth. Has tumor suppressor

properties. Plays a negative regulatory role in the Ras-MAPK pathway. May

function in signaling pathways utilized broadly during fetal development and more selectively in adult tissues and in cells of the lymphohematopoietic system. Could specifically be involved in phospholipid signal transduction.

Cellular Location Cytoplasm. Membrane; Peripheral membrane protein

Expressed in all umbilical cord blood, bone marrow and adult blood cell **Tissue Location**

> sub-populations and in several leukemia cell lines. Highly expressed in fetal blood, brain, lung, liver and kidney Detected at lower levels in adult prostate, testis, ovary, small intestine and colon. Not expressed in adult lung, liver,

kidney or brain.

Background

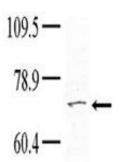
Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

References

Blume-Jensen P, et al. Nature 2001. 411: 355. Cantrell D, J. Cell Sci. 2001. 114: 1439. Jhiang S Oncogene 2000. 19: 5590. Manning G, et al. Science 2002. 298: 1912. 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.

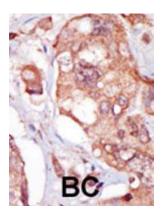
Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.

Images



Western blot analysis of anti-TNK1 pab (cat# AP7722c) in Hela cell line lysate. Dilution of anti-TNK1 was 1:100; dilution of secondary antibody (goat anti-rabbit-HRP) was 1:7000. Data and protocol courtesy of Dr. Richard Lu, Partners HealthCare System at Harvard University.

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.



Citations

• High-throughput RNAi screening identifies a role for TNK1 in growth and survival of pancreatic cancer cells.

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