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TNK1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7722c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q13470
Other Accession	Q99ML2, O95364
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3104
Calculated MW	72468
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.
Precautions	TNK1 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
Tissue Location	Expressed in all umbilical cord blood, bone marrow and adult blood cell 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.

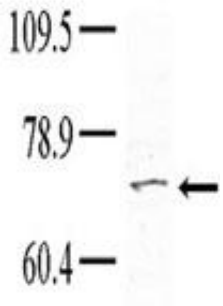
Background

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

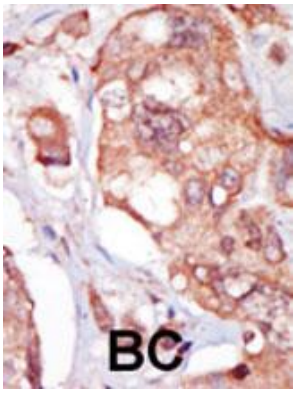
Blume-Jensen P, et al. Nature 2001. 411: 355.
Cantrell D, J. Cell Sci. 2001. 114: 1439.
Jhiang S Oncogene 2000. 19: 5590.
Manning G, et al. Science 2002. 298: 1912.
Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.
Robertson, S. et al. Trends Genet. 2000. 16: 368.
Robinson D, et al. Oncogene 2000. 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.

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