

#### TNK1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1182a

## Specification

# TNK1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype **Description** 

WB, IHC, IF <u>Q13470</u> Human Mouse Monoclonal IgG1

TNK1: tyrosine kinase, non-receptor, 1. TNK1 is a nonreceptor tyrosine kinase(NRPTK). These kinases, like members of the SRC (MIM 190090) and JAK (see MIM 147795) families, mediate intracellular signaling downstream of receptor activation.Tnk1 is a ubiquitously expressed 47-kDa protein with autotyrosine kinase activity that is developmentally regulated during embryogenesis. Tnk1 is also upregulated following IL3 withdrawal from factor-dependent murine NSF/N1.H7 cells that undergo apoptosis, suggesting a role in growth inhibition. Data support a negative regulatory role for Tnk1 in regulating the Ras-Raf1-MAPK growth pathway by a mechanism that requires its autotyrosine kinase activity.

Immunogen Purified recombinant fragment of TNK1 (aa451-560) expressed in E. Coli. <br />

**Formulation** Ascitic fluid containing 0.03% sodium azide.

# TNK1 Antibody - Additional Information

Gene ID 8711

Other Names Non-receptor tyrosine-protein kinase TNK1, 2.7.10.2, CD38 negative kinase 1, TNK1 {ECO:0000312|EMBL:AAC99412.1}

Dilution WB~~1/500 - 1/2000 IHC~~1:200~~1000 IF~~1:200~1000.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

TNK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **TNK1 Antibody - 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.

## **TNK1 Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **TNK1 Antibody - Images**



Figure 1: Western blot analysis using TNK1 mouse mAb against truncated TNK1-His recombinant protein (1).





Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma (A), liver carcinoma (B), breast carcinoma (C) and kiney carcinoma (D), showing nuclear localization with DAB staining using CHK2 mouse mAb.



Figure 3: Confocal immunofluorescence analysis of Hela cells using anti-CHK2 mAb (green), showing nuclear localization. Red: Actin filaments have been labeled with DY-554 phalloidin.

# **TNK1 Antibody - References**

1. Oncogene. 1996 Feb 15;12(4):903-13. 2. Oncogene. 2003 Jun 5;22(23):3562-77. 3. Oncogene. 2007 Oct 4;26(45):6536-45.