

TNK1 (H-11): sc-390359



The Power to Question

BACKGROUND

TNK1 is a 666 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one SH3 domain and one protein kinase domain. Expressed at high levels in fetal lung, liver, brain and kidney and at lower levels in adult ovary, colon, prostate and testis, TNK1 functions to catalyze the ATP-dependent conversion of an L-tyrosine protein to a phosphorylated L-tyrosine protein and is thought to be involved in the negative regulation of cell growth, possibly playing a role in tumor suppression. Additionally, TNK1 may be associated with phospholipid signal transduction and fetal development pathways, further suggesting an important role in growth and development. Multiple isoforms of TNK1 exist and are encoded by a gene which maps to human chromosome 17p13.1.

CHROMOSOMAL LOCATION

Genetic locus: TNK1 (human) mapping to 17p13.1; Tnk1 (mouse) mapping to 11 B3.

SOURCE

TNK1 (H-11) is a mouse monoclonal antibody raised against amino acids 147-199 mapping near the N-terminus of TNK1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TNK1 (H-11) is available conjugated to agarose (sc-390359 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390359 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390359 PE), fluorescein (sc-390359 FITC), Alexa Fluor® 488 (sc-390359 AF488), Alexa Fluor® 546 (sc-390359 AF546), Alexa Fluor® 594 (sc-390359 AF594) or Alexa Fluor® 647 (sc-390359 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390359 AF680) or Alexa Fluor® 790 (sc-390359 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

TNK1 (H-11) is recommended for detection of TNK1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TNK1 siRNA (h): sc-93553, TNK1 siRNA (m): sc-154541, TNK1 shRNA Plasmid (h): sc-93553-SH, TNK1 shRNA Plasmid (m): sc-154541-SH, TNK1 shRNA (h) Lentiviral Particles: sc-93553-V and TNK1 shRNA (m) Lentiviral Particles: sc-154541-V.

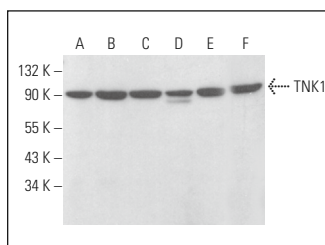
Molecular Weight of TNK1: 72 kDa.

Positive Controls: T-47D cell lysate: sc-2293, Jurkat whole cell lysate: sc-2204 or Neuro-2A whole cell lysate: sc-364185.

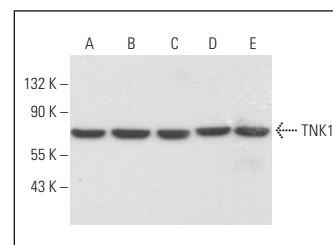
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TNK1 (H-11): sc-390359. Western blot analysis of TNK1 expression in HEL 92.1.7 (A), K-562 (B), DU 145 (C), OVCA9-3 (D), AT3B-1 (E) and c4 (F) whole cell lysates.



TNK1 (H-11): sc-390359. Western blot analysis of TNK1 expression in T-47D (A), Jurkat (B), HCT-116 (C), Neuro-2A (D) and SP2/0 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

- Hong, S., et al. 2020. miR-663b promotes colorectal cancer progression by activating Ras/Raf signaling through downregulation of TNK1. *Hum. Cell* 33: 104-115.
- Ahmed, S., et al. 2022. The noncatalytic regions of the tyrosine kinase TNK1 are important for activity and substrate specificity. *J. Biol. Chem.* 298: 102664.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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