



Rabbit Anti-TNIK antibody

SL4168R

Product Name:	TNIK
Chinese Name:	TRAF2和NCK激酶相互作用蛋白抗体
Alias:	Traf2 and NCK interacting kinase; 1500031A17RIK; 4831440I19RIK; AI451411; C530008O15Rik; C630040K21RIK; KIAA0551; MGC189819; MGC189859; RGD1561817; TNIK; TNIK_HUMAN; TRAF2 and NCK-interacting protein kinase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	150kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TNIK:1281-1360/1360
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	TNIK is a MSN protein kinase that interacts with both TNF receptor-associated factor 2 (TRAF2) and the adapter protein NCK. The protein has been shown to activate the c-Jun N-terminal kinase pathway when over expressed in Phoenix-A cells. TNIK has been shown to phosphorylate gelsolin, the principal intracellular and extracellular actin-severing protein, in vitro. This and evidence from mutational studies suggest that TNIK

functions in the regulation of the cytoskeleton. Northern analysis indicates TNIK expression in human heart, skeletal muscle, and brain, with lower levels of expression in kidney, liver, lung, and pancreas. ESTs have been isolated from human tissue libraries, including normal amnion, gallbladder and skin.

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.

Subunit:

Interacts (via the CNH domain) with RAP2A (GTP-bound form preferentially); the interaction is direct and required for the activation of TNIK by RAP2A. Interacts with NEDD4; recruits RAP2A to NEDD4. Interacts with TRAF2 and NCK. Interacts with TCF7L2/TCF4 and CTNNB1; the interaction is direct. Interacts with TANC1.

Subcellular Location:

Nucleus. Cytoplasm. Recycling endosome. Cytoplasm, cytoskeleton. Note=Associated with recycling endosomes and the cytoskeletal fraction upon RAP2A overexpression.

Tissue Specificity:

Expressed ubiquitously. Highest levels observed in heart, brain and skeletal muscle. Expressed in normal colonic epithelia and colorectal cancer tissues.

Post-translational modifications:

Autophosphorylated. Autophosphorylation is activated by RAP2A and induces association to the cytoskeletal fraction.

Similarity:

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.

Contains 1 CNH domain.

Contains 1 protein kinase domain.

SWISS:

Q9UKE5

Gene ID:

23043

Database links:

[Entrez Gene: 23043](#) Human

[Entrez Gene: 665113](#) Mouse

[Omim: 610005](#) Human

[SwissProt: Q9UKE5](#) Human

[SwissProt: P83510](#) Mouse

[Unigene: 34024](#) Human

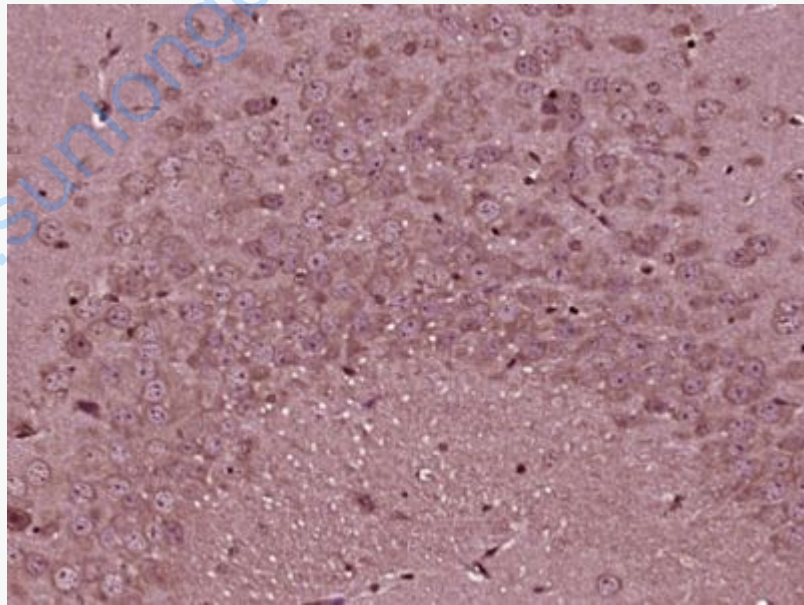
[Unigene: 126193](#) Mouse

[Unigene: 483052](#) Mouse

Important Note:

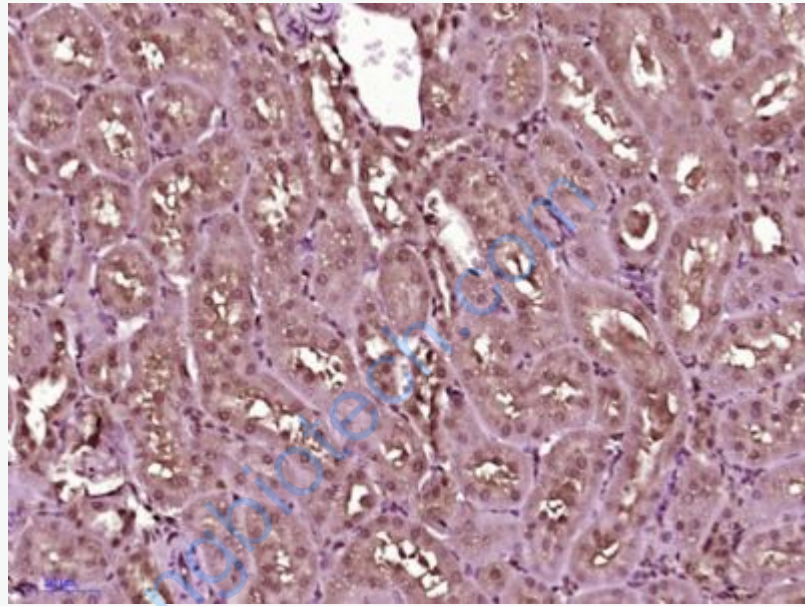
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Picture:



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

for 30min; Antibody incubation with (TNIK) Polyclonal Antibody, Unconjugated (SL4168R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TNIK) Polyclonal Antibody, Unconjugated (SL4168R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.