

Anti-Tensin 3 Antibody

Rabbit Polyclonal Antibody

Catalog # ABV11862

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	Q68CZ2
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	155266

Additional Information

Gene ID	64759
Positive Control	WB: HeLa, DLD, H9C2 cell lysates; IHC: human kidney tissue; IFC: Hela cells
Application & Usage	WB; 1:500 – 1:2000, IHC; 1:50 – 1:200, IF/IC; 1:50 – 1:100
Alias Symbol	TNS3
Other Names	TEM6; TENS1; TPP; Tensin-3; Tensin-like SH2 domain-containing protein 1; Tumor endothelial marker 6
Appearance	Colorless liquid
Formulation	In 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-Tensin 3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TNS3
Synonyms	TEM6, TENS1, TPP
Function	May act as a protein phosphatase and/or a lipid phosphatase (Probable). Involved in the dissociation of the integrin-tensin-actin complex (PubMed: 17643115). EGF activates TNS4 and down-regulates TNS3 which results in capping the tail of ITGB1 (PubMed: 17643115). Increases DOCK5 guanine nucleotide exchange activity towards Rac and plays a role in osteoclast podosome organization (By similarity). Enhances RHOA activation

in the presence of DLC1 (PubMed:[26427649](#)). Required for growth factor-induced epithelial cell migration; growth factor stimulation induces TNS3 phosphorylation which changes its binding preference from DLC1 to the p85 regulatory subunit of the PI3K kinase complex, displacing PI3K inhibitor PTEN and resulting in translocation of the TNS3-p85 complex to the leading edge of migrating cells to promote RAC1 activation (PubMed:[26166433](#)). Meanwhile, PTEN switches binding preference from p85 to DLC1 and the PTEN-DLC1 complex translocates to the posterior of migrating cells to activate RHOA (PubMed:[26166433](#)). Acts as an adapter protein by bridging the association of scaffolding protein PEA3 with integrins ITGB1, ITGB3 and ITGB5 which contributes to the promotion of cell migration (PubMed:[35687021](#)). Controls tonsil-derived mesenchymal stem cell proliferation and differentiation by regulating the activity of integrin ITGB1 (PubMed:[31905841](#)).

Cellular Location

Cell junction, focal adhesion. Cell projection, podosome {ECO:0000250|UniProtKB:Q5SSZ5}. Note=Localizes to both focal and fibrillar adhesions but is mostly found in fibrillar adhesions.

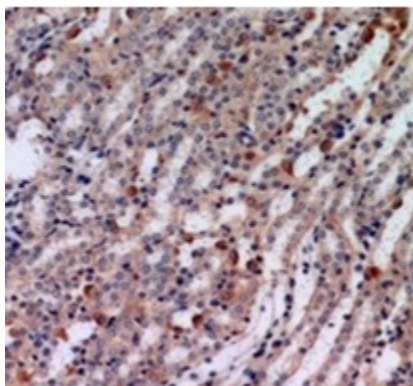
Tissue Location

Expressed in umbilical vein endothelial cells, epithelial cells, and fibroblasts cells (at protein level). Highly expressed in thyroid, kidney and placenta. Low expression in heart, skeletal muscle, spleen, liver, and lung. Expressed at higher levels in tonsil-derived mesenchymal stem cells (MSCs) than in adipose tissue- derived MSCs or bone marrow-derived MSCs (PubMed:[31905841](#)). Expressed in tumor endothelial cells. Expression seems to be down-regulated in thyroid tumor tissues and in anaplastic carcinomas

Background

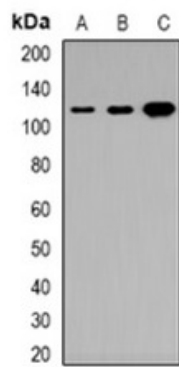
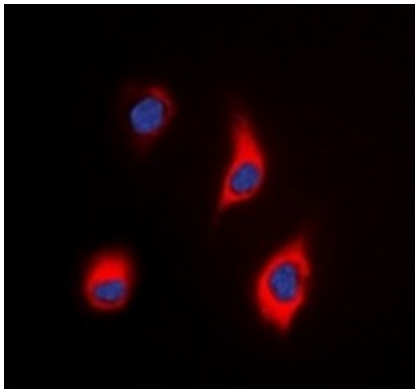
May play a role in actin remodeling. Involved in the dissociation of the integrin-tensin-actin complex. EGF activates TNS4 and down-regulates TNS3 which results in capping the tail of ITGB1. Seems to be involved in mammary cell migration. May be involved in cell migration and bone development.

Images



Immunohistochemical analysis of Tensin 3 staining in H.kidney formalin fixed paraffin embedded tissue section.

Immunofluorescent analysis of Tensin 3 staining in Hela cells.



Western blot analysis of Tensin 3 expression in HeLa(A); DLD(B); H9C2(C) whole cell lysates.

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