

# TXNL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12099a

## **Product Information**

Application	WB, FC, E
Primary Accession	<u>076003</u>
Other Accession	<u>Q58DA7</u> , <u>NP_006532.2</u>
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20866
Calculated MW	37432
Antigen Region	81-110

#### **Additional Information**

Gene ID	10539
Other Names	Glutaredoxin-3, PKC-interacting cousin of thioredoxin, PICOT, PKC-theta-interacting protein, PKCq-interacting protein, Thioredoxin-like protein 2, GLRX3, PICOT, TXNL2
Target/Specificity	This TXNL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 81-110 amino acids from the N-terminal region of human TXNL2.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	TXNL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.
Protein Information	

Name	GLRX3
Synonyms	PICOT {ECO:0000303 PubMed:10636891}, TXN

Function	Together with BOLA2, acts as a cytosolic iron-sulfur (Fe-S) cluster assembly factor that facilitates [2Fe-2S] cluster insertion into a subset of cytosolic proteins (PubMed: <u>26613676</u> , PubMed: <u>27519415</u> ). Acts as a critical negative regulator of cardiac hypertrophy and a positive inotropic regulator (By similarity). Required for hemoglobin maturation (PubMed: <u>23615448</u> ). Does not possess any thyoredoxin activity since it lacks the conserved motif that is essential for catalytic activity.
Cellular Location	Cytoplasm, cytosol. Cytoplasm, cell cortex. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250 UniProtKB:Q9CQM9}. Note=Under the plasma membrane (By similarity). After PMA stimulation, GLRX3 and PRKCQ/PKC-theta translocate to a more extended submembrane area (By similarity). In the Z line, found associated with CSRP3 (By similarity). {ECO:0000250 UniProtKB:Q9CQM9}
Tissue Location	Expressed in heart, spleen, testis and, to a lower extent, in thymus and peripheral blood leukocytes. Weakly expressed in lung, placenta, colon and small intestine

# Background

GLRX3 is a critical negative regulator of cardiac hypertrophy and a positive inotropic regulator (By similarity). May play a role in regulating the function of the thioredoxin system. Does not posses any thyoredoxin activity since it lacks the conserved motif that is essential for catalytic activity.

### References

Ohayon, A., et al. J. Histochem. Cytochem. 58(9):799-806(2010) Haunhorst, P., et al. Biochem. Biophys. Res. Commun. 394(2):372-376(2010) Ohayon, A., et al. J Immunotoxicol 7(1):8-14(2010) Cha, M.K., et al. Cancer Epidemiol 33 (3-4), 281-287 (2009) : Roeske, D., et al. Mol. Psychiatry (2009) In press :

#### Images



All lanes : Anti-TXNL2 Antibody (N-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

TXNL2 Antibody (N-term) (Cat. #AP12099a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the TXNL2 antibody detected the TXNL2 protein (arrow).



TXNL2 Antibody (N-term) (Cat. #AP12099a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the TXNL2 antibody detected the TXNL2 protein (arrow).



TXNL2 Antibody (N-term) (Cat. #AP12099a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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