

# TXNL1 (TRP32/TrxL) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1336b

#### **Specification**

## TXNL1 (TRP32/TrxL) Antibody (C-term) - Product Information

Application WB, IHC-P,E
Primary Accession 043396

Other Accession Q92014, Q8CDN6

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
32251
256-289

# TXNL1 (TRP32/TrxL) Antibody (C-term) - Additional Information

#### **Gene ID 9352**

#### **Other Names**

Thioredoxin-like protein 1, 32 kDa thioredoxin-related protein, TXNL1, TRP32, TXL, TXNL

#### **Target/Specificity**

This TXNL1 (TRP32/TrxL) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 256-289 amino acids from the C-terminal region of human TXNL1 (TRP32/TrxL).

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### **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**

TXNL1 (TRP32/TrxL) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### TXNL1 (TRP32/TrxL) Antibody (C-term) - Protein Information

## Name TXNL1



Synonyms TRP32, TXL, TXNL

Function Active thioredoxin with a redox potential of about -250 mV.

**Cellular Location** 

Cytoplasm. Nucleus. Note=At least 85% of the cellular TXNL1 is proteasome-associated

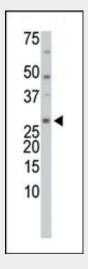
**Tissue Location** Ubiquitous.

# TXNL1 (TRP32/TrxL) Antibody (C-term) - Protocols

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

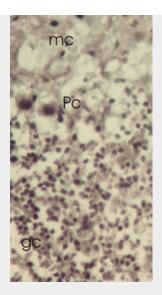
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# TXNL1 (TRP32/TrxL) Antibody (C-term) - Images



The anti-TrxL Pab (Cat. #AP1336b) is used in Western blot to detect TrxL in HL-60 cell lysate.





Mouse cerebellar cortex showing molecular cell layer (mc), Purkinje cells (Pc) and granular cell layer. Trxl-1 antibody Cat # AP1336b gives strong nuclear labeling in Purkinje cells and granular cells with lower cytoplasmic staining. The results correspond precisely to TrxL-1 mRNA expression shown with in situ hybridization (Jiménez A et al. FEBS Lett. 2006, 580(3):960-7) and could be abolished with peptide used for immunization (Blocking peptide, Cat # BP1336b). The fixation was 4% paraformaldehyde perfusion (4mins) and 60 mins immersion. Staining was done in frozen sections with Vector Elite kit and nickel intensified DAB as a chromogen. Data courtesy of Prof. Markku Pelto-Huikko, Department of Developmental Biology, Medical School, Tampere University, Finland.

# TXNL1 (TRP32/TrxL) Antibody (C-term) - Background

Thioredoxins are a group of small redox active proteins possessing a conserved active site sequence. TrxL (Thioredoxin like protein 1) has 2 distinct domains: an N terminal domain, which is 43% identical to human TXN, and a C terminal domain, which shows no homology to other proteins in the sequence databases. The active site sequence, located within the N terminal domain, is that of a thioredoxin like protein; compared to the active site sequence of TXN, it has a single amino acid substitution. Unlike other thioredoxin like proteins, TrxL does not serve as a substrate for thioredoxin reductase in an insulin assay.

## TXNL1 (TRP32/TrxL) Antibody (C-term) - References

Miranda-Vizuete, A., et al., Biochem. Biophys. Res. Commun. 243: 284-288 (1998).