## For Research Use Only

## TXNDC5 Recombinant antibody

Catalog Number:84756-5-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

84756-5-RR BC001199 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 81567 Nanodrop: **UNIPROT ID:** Q8NBS9

Isotype: thioredoxin domain containing 5

(endoplasmic reticulum) IgG

Immunogen Catalog Number: Calculated MW: 432 aa, 48 kDa AG13965

> Observed MW: 48 kDa

Full Name:

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, ELISA

Species Specificity:

Rabbit

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** Protein A purfication

CloneNo.:

242195G7

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:800 IF/ICC 1:250-1:1000

Positive Controls:

WB: HepG2 cells, TF-1 cells, COLO 320 cells, K-562

cells, LNCap cells, Jurkat cells

IHC: human stomach cancer tissue.

IF/ICC : HeLa cells.

## **Background Information**

TXNDC5, or Thioredoxin Domain Containing 5, is a protein-coding gene that plays a significant role in cellular processes, particularly in the endoplasmic reticulum (ER). This gene is essential for the proper functioning of the cellular environment, primarily through its involvement in the formation and rearrangement of disulfide bonds within proteins. Disulfide bonds are crucial for the stability and functionality of many proteins, and TXNDC5 facilitates these processes through its thioredoxin domains, which contain enzymatic activities that promote correct  $protein folding \ and \ maturation \ in \ the \ ER. \ Recent studies \ highlight \ the \ expression \ characteristics \ of \ TXNDC5 \ across$ various diseases. It has been implicated in the promotion of malignant diseases, suggesting a potential role in cancer biology and other pathological conditions. (PMID:25526565; 38629066)

Storage

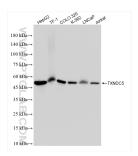
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

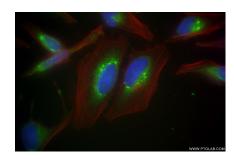
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

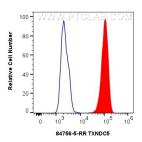
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 84756-5-RR (TKNDC 5 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



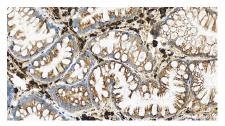
Immunofluorescent analysis of (4% PFA) fixed Hela cells using TXNDC5 antibody (84756-5-RR, Clone: 242195G7) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



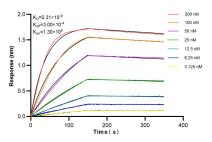
1x10^6 HeLa cells were intracellularly stained with 0.25 ug TXNDC5 Recombinant antibody (84756-5-RR, Clone:242195G7) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 84756-5-RR (TXNDC5 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 84756-5-RR (TXNDC5 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84756-5-RR against Human TXNDC5 were performed. The affinity constant is 2.31 nM.