

For Research Use Only

TMX1 Polyclonal antibody

Catalog Number: 27489-1-AP

6 Publications



Basic Information

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|---|--|---|
| Catalog Number: 27489-1-AP | GenBank Accession Number: BC036460 | Purification Method: Antigen affinity purification |
| Size: 150ul , Concentration: 1400 ug/ml by Nanodrop and 767 ug/ml by Bradford method using BSA as the standard; | GeneID (NCBI): 81542 | Recommended Dilutions: WB 1:2000-1:10000 IHC 1:200-1:800 |
| Source: Rabbit | UNIPROT ID: Q9H3N1 | |
| Isotype: IgG | Full Name: thioredoxin-related transmembrane protein 1 | |
| Immunogen Catalog Number: AG26595 | Calculated MW: 32 kDa | |
| | Observed MW: 31 kDa | |

Applications

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|--|--|
| Tested Applications: WB, IHC, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF | WB : HEK-293T cells, mouse brain tissue, HeLa cells, Jurkat cells |
| Species Specificity: human, mouse, rat | IHC : human kidney tissue, |
| Cited Species: human, mouse | |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

TMX1, one of the few transmembrane members of the family, is the first vascular thiol isomerase with antithrombotic function. It forms functional complexes with the ER lectin calnexin and preferentially intervenes during maturation of cysteine-containing, membrane-associated proteins while ignoring the same cysteine-containing ectodomains if not anchored at the ER membrane. As such, TMX1 is the first example of a topology-specific client protein redox catalyst in living cells (PMID: 30655304). Covalent modification with AMS increases the molecular mass of originally oxidized species by ~0.5 kDa per thiol group, which allows enhanced separation from the reduced form in electrophoresis (PMID: 29123984). TMX1 has 2 bands produced by redox with the MW of 30-32 kDa.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|------------|-------------|
| Xie Ge | 35803125 | Redox Biol | WB |
| Hongyan Hui | 39939413 | Sci Rep | WB, IHC, IF |
| Olaya Yassin | 39621446 | Biochem J | WB |

Storage

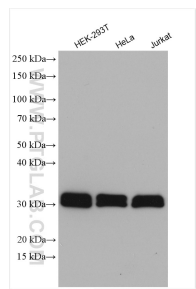
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

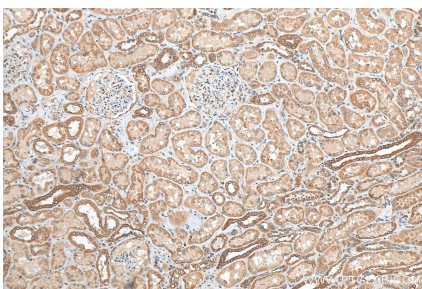
For technical support and original validation data for this product please contact:
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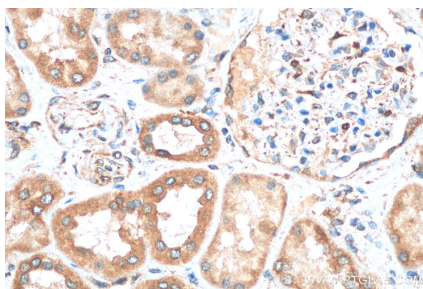
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 27489-1-AP (TMX1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 27489-1-AP (TMX1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 27489-1-AP (TMX1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).