

**CTSA Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10476a**

**Specification**

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**CTSA Antibody (N-term) - Product Information**

Application	IHC-P-Leica, WB,E
Primary Accession	<a href="#">P10619</a>
Other Accession	<a href="#">NP_001161066.1</a> , <a href="#">NP_000299.2</a> , <a href="#">NP_001121167.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	18-45

**CTSA Antibody (N-term) - Additional Information**

**Gene ID** 5476

**Other Names**

Lysosomal protective protein, Carboxypeptidase C, Carboxypeptidase L, Cathepsin A, Protective protein cathepsin A, PPCA, Protective protein for beta-galactosidase, Lysosomal protective protein 32 kDa chain, Lysosomal protective protein 20 kDa chain, CTSA, PPGB

**Target/Specificity**

This CTSA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 18-45 amino acids from the N-terminal region of human CTSA.

**Dilution**

IHC-P-Leica~~1:500

WB~~1:2000

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**

CTSA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CTSA Antibody (N-term) - Protein Information**

**Name** CTSA

**Synonyms** PPGB

**Function** Protective protein appears to be essential for both the activity of beta-galactosidase and neuraminidase, it associates with these enzymes and exerts a protective function necessary for their stability and activity. This protein is also a carboxypeptidase and can deamidate tachykinins.

**Cellular Location**

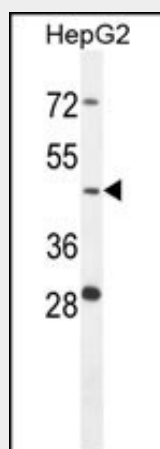
Lysosome.

### CTSA Antibody (N-term) - Protocols

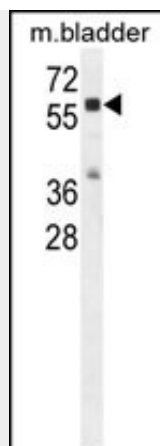
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

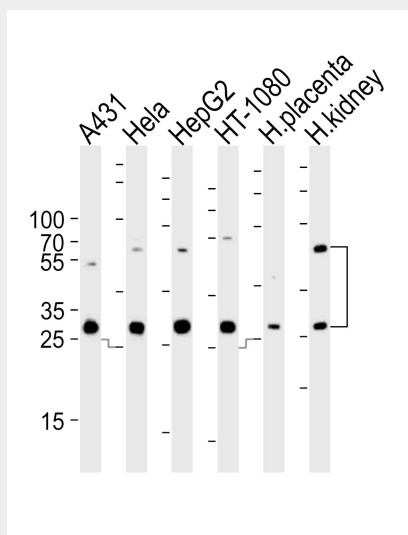
### CTSA Antibody (N-term) - Images



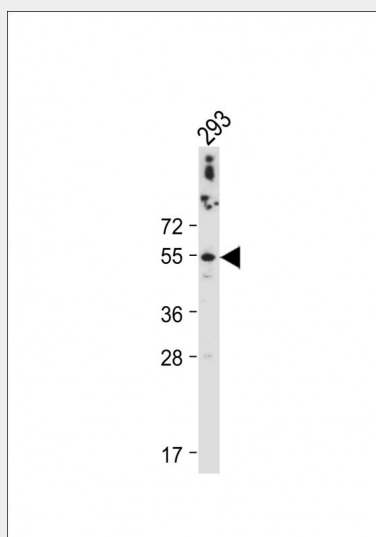
CTSA Antibody (N-term) (Cat. #AP10476a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the CTSA antibody detected the CTSA protein (arrow).



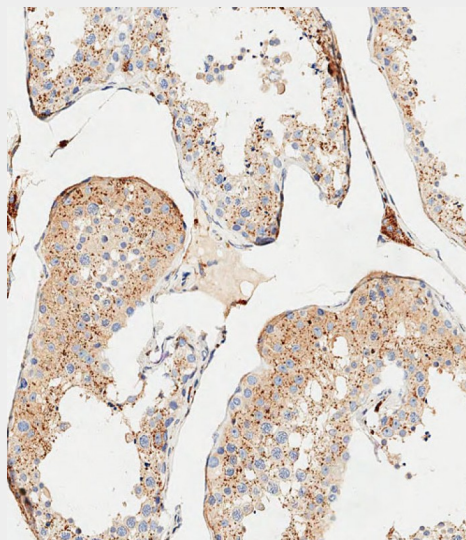
CTSA Antibody (N-term) (Cat. #AP10476a) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the CTSA antibody detected the CTSA protein (arrow).



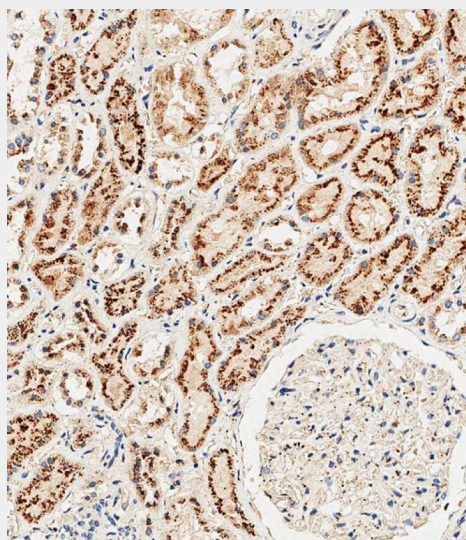
Western blot analysis of lysates from A431, HeLa, HepG2, HT-1080 cell line and human placenta, kidney tissue lysate (from left to right), using CTSA Antibody (N-term) (Cat. #AP10476a). AP10476a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Anti-CTSA Antibody (N-term) at 1:2000 dilution + 293 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 : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human testis tissue using AP10476a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP10476a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

### **CTSA Antibody (N-term) - Background**

CTSA encodes a glycoprotein which associates with lysosomal enzymes beta-galactosidase and neuraminidase to form a complex of high molecular weight multimers. The formation of this complex provides a protective role for stability and activity. Deficiencies in this gene are linked to multiple forms of

galactosialidosis.

#### **CTSA Antibody (N-term) - References**

Reich, M., et al. Immunol. Lett. 128(2):143-147(2010)  
Bonten, E.J., et al. J. Biol. Chem. 284(41):28430-28441(2009)  
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :  
Tatano, Y., et al. J. Med. Invest. 53 (1-2), 103-112 (2006) :  
Lewandowski, U., et al. Mol. Cell Proteomics 5(2):226-233(2006)

#### **CTSA Antibody (N-term) - Citations**

- [Chemical chaperone treatment for galactosialidosis: Effect of NOEV on  \$\beta\$ -galactosidase activities in fibroblasts.](#)