

CTSA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10476a

Specification

CTSA Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Host Clonality Isotype Antigen Region IHC-P-Leica, WB,E <u>P10619</u> <u>NP_001161066.1</u>, <u>NP_000299.2</u>, <u>NP_001121167.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 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

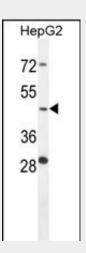
Function Protective protein appears to be essential for both the activity of beta-galactosidase and neuraminidase, it associates with these enzymes and exerts a protective function necessary for their stability and activity. This protein is also a carboxypeptidase and can deamidate tachykinins.

Cellular Location Lysosome.

CTSA Antibody (N-term) - Protocols

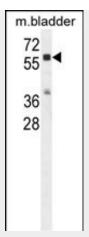
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **CTSA Antibody (N-term) Images**

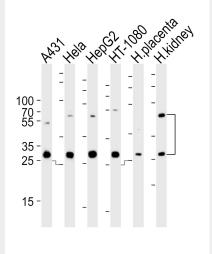


CTSA Antibody (N-term) (Cat. #AP10476a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the CTSA antibody detected the CTSA protein (arrow).

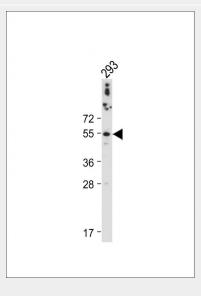




CTSA Antibody (N-term) (Cat. #AP10476a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the CTSA antibody detected the CTSA protein (arrow).

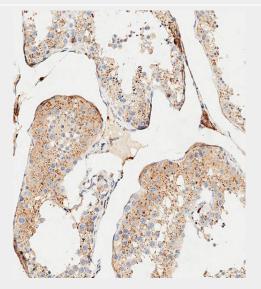


Western blot analysis of lysates from A431, Hela, HepG2, HT-1080 cell line and human placenta, kidney tissue lysate (from left to right), using CTSA Antibody (N-term)(Cat. #AP10476a). AP10476a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary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





Anti-CTSA Antibody (N-term) at 1:2000 dilution + 293 whole cell lysate Lysates/proteins at 20 μ g 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) : Lewandrowski, U., et al. Mol. Cell Proteomics 5(2):226-233(2006) **CTSA Antibody (N-term) - Citations**

• <u>Chemical chaperone treatment for galactosialidosis: Effect of NOEV on β-galactosidase</u> activities in fibroblasts.