10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CTSA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10476a

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	P10619
Other Accession	NP_001161066.1, NP_000299.2, NP_001121167.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23380
Calculated MW	54466
Antigen Region	18-45

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~~1:1000 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.

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.

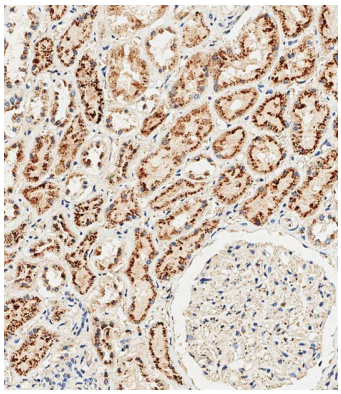
Background

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.

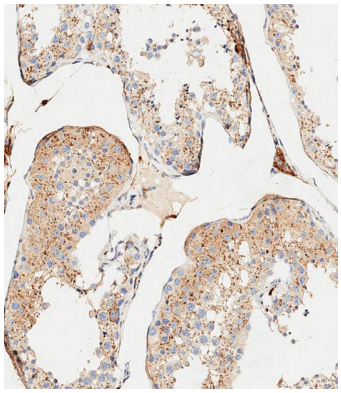
References

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)

Images

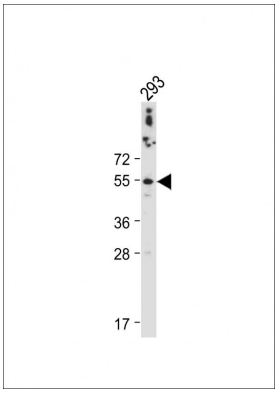


Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP10476a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1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



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.

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.



Citations

- Chemical chaperone treatment for galactosialidosis: Effect of NOEV on β-galactosidase activities in fibroblasts.