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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
Predicted	Canine, Rabbit
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 (HGNC:9251)

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 (PubMed:1907282). Also functions as an activator of the sialidase NEU1 (PubMed:37205763). This protein is also a carboxypeptidase and can deamidate tachykinins (PubMed:1694176, PubMed:1756715, PubMed:1907282).
Cellular Location	Lysosome.

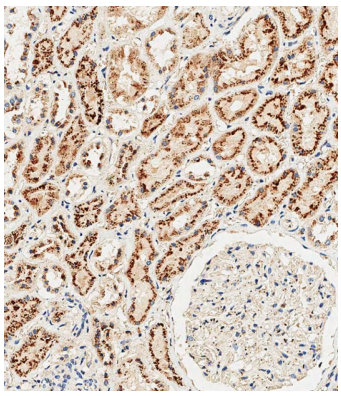
Background

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.

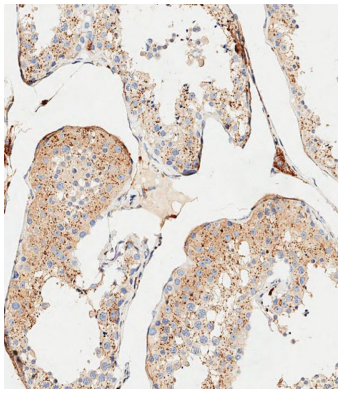
References

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

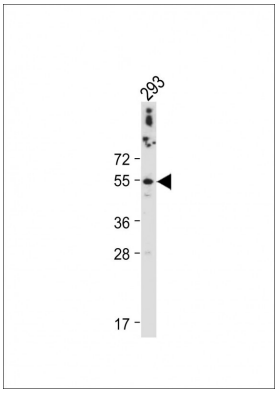


Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP10476a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.