

Datasheet for ABIN6655368
anti-CTSA antibody



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2 Images

Overview

Quantity:	200 µL
Target:	CTSA
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CTSA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	Protective Protein/Cathepsin A Antibody
Immunogen:	This whole rabbit serum was prepared by repeated immunizations with native 54-kDa human Protective Protein/Cathepsin A (PPCA) precursor, purified from the medium of baculovirus infected insect cells.
Isotype:	IgG
Cross-Reactivity (Details):	Based on sequence we expect this antibody to react with PPCA from other sources, although specific reactivity has not been confirmed.
Purification:	This antiserum is directed against PPCA and reacts with the PPCA from human tissues.
Sterility:	Sterile filtered

Target Details

Target:	CTSA
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Target Details

Alternative Name:	Protective Protein/Cathepsin A (CTSA Products)
Background:	<p>Synonyms: rabbit anti-Protective Protein Antibody, rabbit anti-Cathepsin A Antibody, Beta Galactosidase Protective Protein antibody, Carboxypeptidase C antibody, Cathepsin A antibody, CTSA antibody, Glactosialidosis antibody, GLB2 antibody, Goldberg Syndrome antibody</p> <p>Background: Lysosomal protective protein/cathepsin A (PPCA) is a lysosomal serine carboxypeptidase that forms an intralysosomal enzyme-complex with b-galactosidase and neuraminidase (NEU1). PPCA is synthesized as a 54- kDa precursor/zymogen, and proteolytically cleaved in the lysosome into a catalytically active 32- and 20- kDa two-chain enzyme. The enzyme has cathepsin A activity at acidic pH but maintains also a deamidase/esterase activity at neutral pH . Furthermore, the human enzyme, purified from platelets and lymphocytes, has been shown to function on the inactivation of selected neuropeptides, like substance P, oxytocin, and endothelin I. The autosomal recessive genetic deficiency of PPCA causes galactosialidosis, a neurodegenerative lysosomal storage disorder, resulting in the secondary deficiencies of b-galactosidase and NEU1.</p> <p>Gene Name: CTSA, PPGB</p>

Gene ID:	5476
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UniProt:	P10619
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Application Details

Application Notes:	ELISA_Dilution: 1:1,000 - 1:5,000 Immunohistochemistry_Dilution: 1:500 Western_Blot_Dilution: 1:500 - 1:2,000 Other: User Optimized
Comment:	Suggested Applications: IP Anti-PPCA has been tested by immunohistochemistry and is suitable for the detection of human PPCA (54-, 32-, and 20-kDa) on Western blot, by immunoprecipitation, immunocytochemistry, and ELISA of either transfected cells (e.g. COS-1 cells) or primary cells (e.g. fibroblasts).
Restrictions:	For Research Use only

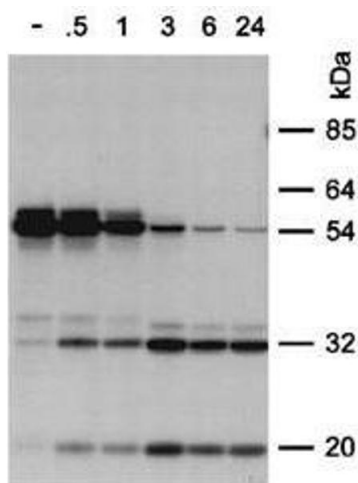
Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Handling

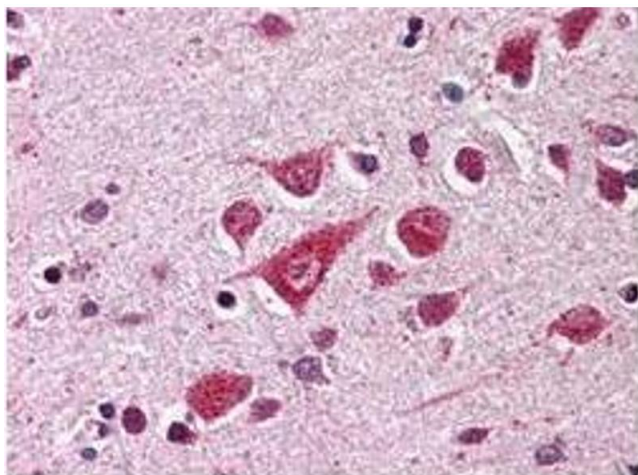
	Stabilizer: None
	Preservative: 0.1 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Anti-PPCA Antibody - Immunoprecipitation Pulse-chase labeling. COS-1 cells were transfected with cDNAs encoding neuraminidase and PPCA, labeled with [3H]leucine for 1 h and chased with cold leucine for the time periods indicated. Cell lysates and medium samples were immunoprecipitated with anti-PPCA antiserum. Exposure was for 20 days. This antibody immunoprecipitates 3 forms of PPCA: a 54 kDa precursor, and both the 32 kDa and 20 kDa mature subunits. Personal Communication, E. Bonten. See van der Spoel et al (1998) for additional details.



Immunohistochemistry

Image 2. Anti-PPCA Antibody - Immunohistochemistry Anti-PPCA antibody was diluted 1:500 to detect PPCA in human brain cortex tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.