abcam

Product datasheet

Recombinant Human Protective protein/Cathepsin A (PPCA) ab159166

1 Image

Overview

Product name	Recombinant Human Protective protein/Cathepsin A (PPCA)
Protein length	Full length protein

Description

Nature	Recombinant
Source	Wheat germ

Amino Acid Sequence

Species	Human
Sequence	MIRAAPPPLFLLLLLLLLLVSWASRGEAAPDQDEIQRLPGLAKQPSFRQY SGYLKGSGSKHLHYWFVESQKDPENSPVVLWLNGGPGCSSLDGLLTEHGP FLVQPDGVTLEYNPYSWNLIANVLYLESPAGVGFSYSDDKFYATNDTEVA QSNFEALQDFFRLFPEYKNNKLFLTGESYAGIYIPTLAVLVMQDPSMNLQ GLAVGNGLSSYEQNDNSLVYFAYYHGLLGNRLWSSLQTHCCSQNKCNFYD NKDLECVTNLQEVARIVGNSGLNIYNLYAPCAGGVPSHFRYEKDTVVVQD LGNIFTRLPLKRMWHQALLRSGDKVRMDPPCTNTTAASTYLNNPYVRKAL NIPEQLPQWDMCNFLVNLQYRRLYRSMNSQYLKLLSSQKYQILLYNGDVD MACNFMGDEWFVDSLNQKMEVQRRPWLVKYGDSGEQIAGFVKEFSHIAFL TIKGAGHMVPTDKPLAAFTMFSRFLNKQPY
Amino acids	1 to 480
Tags	proprietary tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of **ab159166** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA Western blot
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/ml.

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles.

pH: 8.00
Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

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.

Involvement in disease

Defects in CTSA are the cause of galactosialidosis (GSL) [MIM:256540]. A lysosomal storage disease associated with a combined deficiency of beta-galactosidase and neuraminidase, secondary to a defect in cathepsin A. All patients have clinical manifestations typical of a lysosomal disorder, such as coarse facies, cherry red spots, vertebral changes, foam cells in the bone marrow, and vacuolated lymphocytes. Three phenotypic subtypes are recognized. The early infantile form is associated with fetal hydrops, edema, ascites, visceromegaly, skeletal dysplasia, and early death. The late infantile type is characterized by hepatosplenomegaly, growth retardation, cardiac involvement, and a normal or mildly affected mental state. The juvenile/adult form is characterized by myoclonus, ataxia, angiokeratoma, mental retardation, neurologic deterioration, absence of visceromegaly, and long survival.

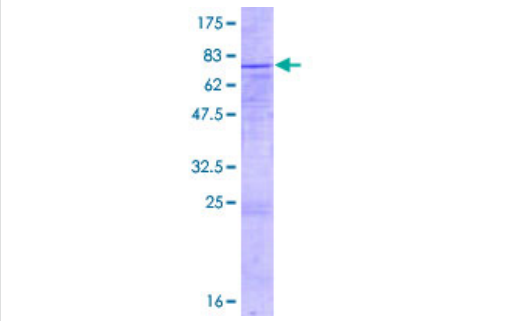
Sequence similarities

Belongs to the peptidase S10 family.

Cellular localization

Lysosome.

Images



ab159166 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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