


Anti-P5CS antibody ab111977

[1 References](#) [1 Image](#)

Overview

Product name	Anti-P5CS antibody
Description	Rabbit polyclonal to P5CS
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Recombinant fragment, corresponding to amino acids 10-257 of Human P5CS (BC117240).
Positive control	Human fetal kidney, liver and spleen lysates.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Lyophilized: Add 200ul Steriled Distilled Water.
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 98.88% PBS, 1% BSA
Purity	Immunogen affinity purified
Purification notes	ab111977 is purified by a peptide affinity column.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab111977 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 87 kDa.

Target

Pathway

Amino-acid biosynthesis; L-proline biosynthesis; L-glutamate 5-semialdehyde from L-glutamate: step 1/2.

Amino-acid biosynthesis; L-proline biosynthesis; L-glutamate 5-semialdehyde from L-glutamate: step 2/2.

Involvement in disease

Defects in ALDH18A1 are the cause of mental retardation-joint hypermobility-skin laxity with or without metabolic abnormalities (MRJHSL) [MIM:612652]. Clinical manifestations include microcephaly, progressive neurologic dysfunction, mental retardation, progeroid appearance, joint hypermobility, skin laxity and hyperelasticity, cataracts. Some patients manifest metabolic disturbances such as hyperammonemia, hypomethioninemia, hypocitrullinemia, hypoargininemia and hypoprolinemia.

Sequence similarities

In the N-terminal section; belongs to the glutamate 5-kinase family.

In the C-terminal section; belongs to the gamma-glutamyl phosphate reductase family.

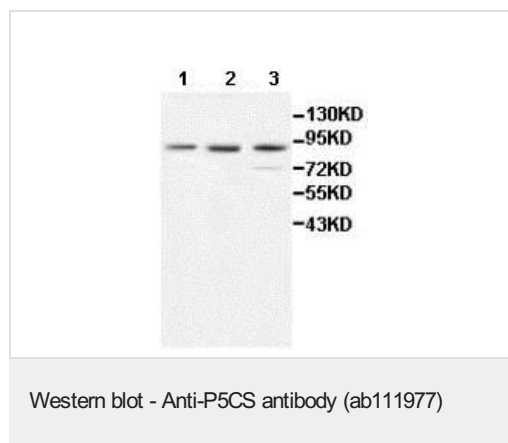
Cellular localization

Mitochondrion inner membrane.

Form

P5CS catalyzes the ATP- and NADPH-dependent conversion of L-glutamate to glutamic gamma-semialdehyde, which is the metabolic precursor for proline biosynthesis. There are 2 isoforms produced by alternative splicing.

Images



All lanes : Anti-P5CS antibody (ab111977) at 1/500 dilution

Lane 1 : Human fetal kidney lysate

Lane 2 : Human fetal liver lysate

Lane 3 : Human fetal spleen lysate

Predicted band size: 87 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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