

For Research Use Only

P5CS Monoclonal antibody

Catalog Number: 68184-1-Ig

Featured Product

1 Publications



Basic Information

Catalog Number:

68184-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG12100

GenBank Accession Number:

BC106054

GeneID (NCBI):

5832

UNIPROT ID:

P54886

Full Name:

aldehyde dehydrogenase 18 family, member A1

Calculated MW:

795 aa, 87 kDa

Observed MW:

87 kDa

Purification Method:

Protein A purification

CloneNo.:

3B1E11

Recommended Dilutions:

WB 1:5000-1:50000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

IF

Species Specificity:

human, mouse, rat

Cited Species:

mouse

Positive Controls:

WB: U2OS cells, HAP1 cells, mouse colon tissue, rat colon tissue, A549 cells, MCF-7 cells, HeLa cells, LNCaP cells, HepG2 cells, K-562 cells

Background Information

Delta 1-pyrroline-5-carboxylate synthetase (P5CS), also named as GSAS, P5CS, PYCS, catalyzes the ATP and the NAD(P)H-dependent conversion of L-glutamate to glutamic gamma-semialdehyde (GSA) which is the metabolic precursor for proline biosynthesis(PMID:8761662). This protein includes 2 domains: glutamate 5-kinase and gamma-glutamyl phosphate reductase. In the N-terminal section, it belongs to the glutamate 5-kinase family and in the C-terminal section, it belongs to the gamma-glutamyl phosphate reductase family. Defects in ALDH18A1 are the cause of cutis laxa, autosomal recessive, type 3A (ARCL3A)(PMID:18478038). It has 2 isoforms produced by alternative splicing.

Notable Publications

Author	Pubmed ID	Journal	Application
Keun Woo Ryu	39506109	Nature	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

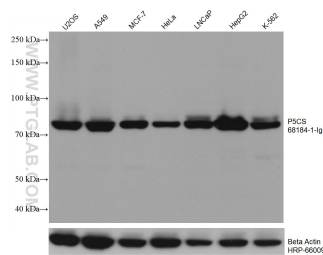
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

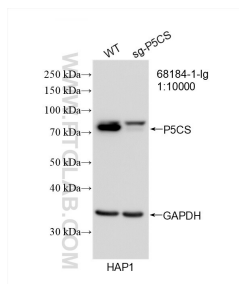
E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68184-1-Ig (P5CS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



WB result of P5CS antibody (68184-1-Ig; 1:10000; room temperature for 1.5 hours) with wild-type and sg-P5CS transfected HAP1 cells.