

For Research Use Only

P5CS Recombinant monoclonal antibody

Catalog Number:87037-1-RR



Basic Information

Catalog Number: 87037-1-RR	GenBank Accession Number: BC106054	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5832	CloneNo.: 252125B12
Source: Rabbit	UNIPROT ID: P54886	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF/ICC: 1:250-1:1000
Isotype: IgG	Full Name: aldehyde dehydrogenase 18 family, member A1	
Immunogen Catalog Number: AG12100	Calculated MW: 795 aa, 87 kDa	
	Observed MW: 75-87 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, mouse colon tissue, rat colon tissue, HepG2 cells, HEK-293T cells, NIH/3T3 cells, mouse brain tissue

IHC: rat brain tissue,

IF/ICC: HeLa cells,

Background Information

Delta 1-pyrroline-5-carboxylate synthetase (P5CS), also named as GSAS and 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.

Storage

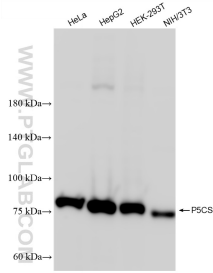
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

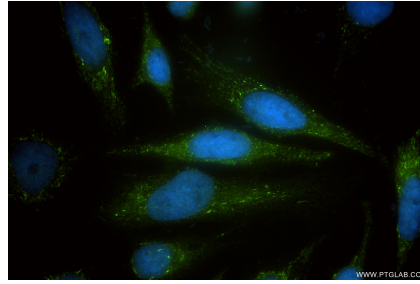
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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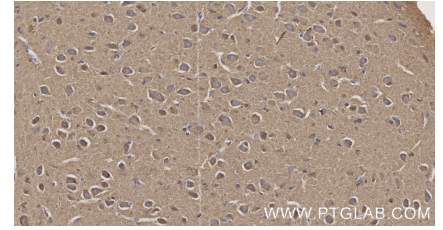
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87037-1-RR (P5CS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using P5CS antibody (87037-1-RR, Clone: 252125B12) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 87037-1-RR (P5CS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).