

For Research Use Only

AASS Polyclonal antibody

Catalog Number: 29354-1-AP



Basic Information

Catalog Number:

29354-1-AP

Size:

150ul, Concentration: 360 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG29520

GenBank Accession Number:

NM_005763

GeneID (NCBI):

10157

UNIPROT ID:

Q9UDR5

Full Name:

aminoadipate-semialdehyde synthase

Calculated MW:

102 kDa

Observed MW:

100-110 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC: 1:300-1:1200

Applications

Tested Applications:

WB, IHC, IP, 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: mouse liver tissue, rat liver tissue

IP: mouse liver tissue,

IHC: human liver cancer tissue, mouse liver tissue

Background Information

Aminoadipate-semialdehyde synthase (AASS) is a bifunctional enzyme catalyzing the first two steps of lysine degradation via the saccharopine pathway. It possesses both lysine-ketoglutarate reductase and saccharopine dehydrogenase activities. Mutations in the AASS gene cause familial hyperlysinemia, a rare autosomal recessive disorder characterized by elevated plasma lysine levels, though clinical manifestations are typically benign. AASS dysfunction disrupts mitochondrial energy metabolism and amino acid homeostasis. Beyond its metabolic role, emerging evidence suggests AASS may influence cellular redox status and autophagy regulation, positioning it as a potential therapeutic target for metabolic disorders and lysine-related pathologies (PMID: 41158987; 10775527).

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

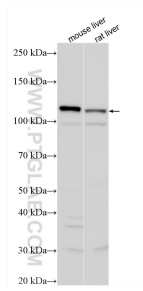
For technical support and original validation data for this product please contact:

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

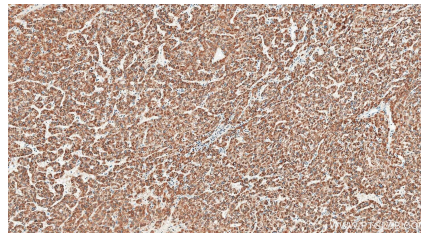
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

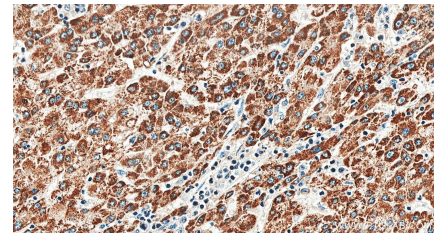
Selected Validation Data



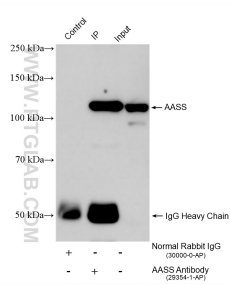
Various lysates were subjected to SDS PAGE followed by western blot with 29354-1-AP (AASS antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 29354-1-AP (AASS antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 29354-1-AP (AASS antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-AASS (IP:29354-1-AP, 4ug; Detection:29354-1-AP 1:3000) with mouse liver tissue lysate 2480 ug.