

PSAP Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1791a**Specification****PSAP Antibody - Product Information**

Application	E, WB, IF, FC, IHC
Primary Accession	P07602
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	58.1kDa KDa

Description

This gene encodes a highly conserved glycoprotein which is a precursor for 4 cleavage products: saposins A, B, C, and D. Each domain of the precursor protein is approximately 80 amino acid residues long with nearly identical placement of cysteine residues and glycosylation sites. Saposins A-D localize primarily to the lysosomal compartment where they facilitate the catabolism of glycosphingolipids with short oligosaccharide groups. The precursor protein exists both as a secretory protein and as an integral membrane protein and has neurotrophic activities. Mutations in this gene have been associated with Gaucher disease, Tay-Sachs disease, and metachromatic leukodystrophy. Alternative splicing results in multiple transcript variants encoding different isoforms.

Immunogen

Purified recombinant fragment of human PSAP (AA: 325-524) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

PSAP Antibody - Additional Information

Gene ID 5660

Other Names

Prosaposin, Proactivator polypeptide, Saposin-A, Protein A, Saposin-B-Val, Saposin-B, Cerebroside sulfate activator, CSAct, Dispersin, Sphingolipid activator protein 1, SAP-1, Sulfatide/GM1 activator, Saposin-C, A1 activator, Co-beta-glucosidase, Glucosylceramidase activator, Sphingolipid activator protein 2, SAP-2, Saposin-D, Component C, Protein C, PSAP, GLBA, SAP1

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IF~~1/50-1/500
FC~~1/200 - 1/400
IHC~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles.

Precautions

PSAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PSAP Antibody - Protein Information

Name PSAP

Synonyms GLBA, SAP1

Function

Saposin-A and saposin-C stimulate the hydrolysis of glucosylceramide by beta-glucosylceramidase (EC 3.2.1.45) and galactosylceramide by beta-galactosylceramidase (EC 3.2.1.46). Saposin- C apparently acts by combining with the enzyme and acidic lipid to form an activated complex, rather than by solubilizing the substrate. Saposin-D is a specific sphingomyelin phosphodiesterase activator (EC 3.1.4.12). Saposins are specific low-molecular mass non-enzymic proteins, they participate in the lysosomal degradation of sphingolipids, which takes place by the sequential action of specific hydrolases.

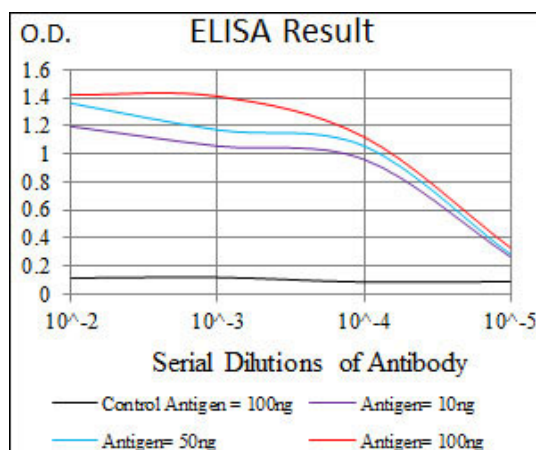
Cellular Location

Lysosome

PSAP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



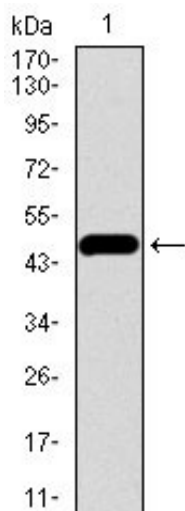


Figure 1: Western blot analysis using PSAP mAb against human PSAP recombinant protein. (Expected MW is 47.8 kDa)

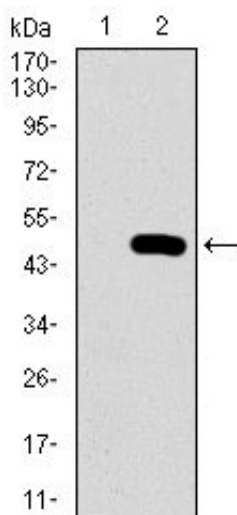


Figure 2: Western blot analysis using PSAP mAb against HEK293 (1) and PSAP (AA: 325-524)-hIgGFc transfected HEK293 (2) cell lysate.

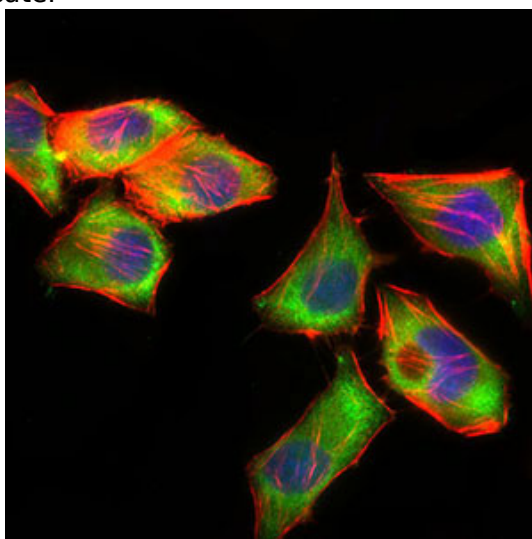


Figure 3: Immunofluorescence analysis of HepG2 cells using PSAP mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

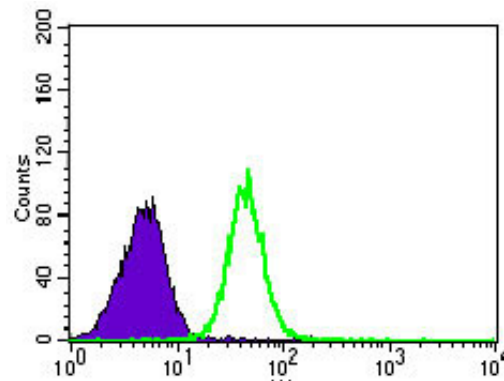


Figure 4: Flow cytometric analysis of HeLa cells using PSAP mouse mAb (green) and negative control (purple).

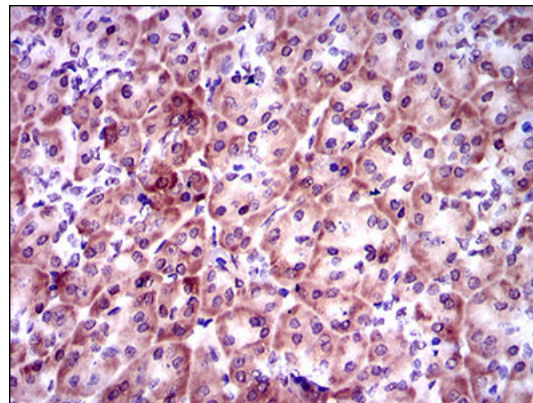


Figure 5: Immunohistochemical analysis of paraffin-embedded pancreas tissues using PSAP mouse mAb with DAB staining.

PSAP Antibody - Background

This gene encodes a hematopoietic-specific transcription factor that induces high-level expression of adult beta-globin and other erythroid genes. The zinc-finger protein binds to the DNA sequence CCACACCCT found in the beta hemoglobin promoter. Heterozygous loss-of-function mutations in this gene result in the dominant In(Lu) blood phenotype. ; ;

PSAP Antibody - References

1. Biochem J. 2012 Jan 15;441(2):665-74.
2. Mol Cancer. 2010 Feb 4;9:30.