

Product datasheet

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ARG58161 anti-PSAP antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes PSAP

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name PSAP

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 60-310 of Human PSAP (NP_002769.1).

Conjugation Un-conjugated

Alternate Names Glucosylceramidase activator; SAP-1; Sphingolipid activator protein 1; Component C; Protein C;

Proactivator polypeptide; Protein A; Sphingolipid activator protein 2; Cerebroside sulfate activator; A1

activator; Prosaposin; Dispersin; SAP-2; Co-beta-glucosidase; CSAct; SAP1; GLBA; Sulfatide/GM1

activator

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	
Observed Size	~ 58 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

PSAP

Gene Full Name

prosaposin

Background

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. [provided by RefSeq, Jul 2008]

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-B stimulates the hydrolysis of galacto-cerebroside sulfate by arylsulfatase A (EC 3.1.6.8), GM1 gangliosides by beta-galactosidase (EC 3.2.1.23) and globotriaosylceramide by alpha-galactosidase A (EC 3.2.1.22). Saposin-B forms a solubilizing complex with the substrates of the sphingolipid hydrolases.

Saposin-D is a specific sphingomyelin phosphodiesterase activator (EC 3.1.4.12).

Prosaposin: Behaves as a myelinotrophic and neurotrophic factor, these effects are mediated by its G-protein-coupled receptors, GPR37 and GPR37L1, undergoing ligand-mediated internalization followed by ERK phosphorylation signaling.

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. [UniProt]

Calculated Mw

58 kDa

PTM

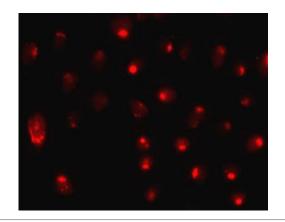
The lysosomal precursor is proteolytically processed to 4 small peptides, which are similar to each other and are sphingolipid hydrolase activator proteins.

N-linked glycans show a high degree of microheterogeneity.

The one residue extended Saposin-B-Val is only found in 5% of the chains. [UniProt]

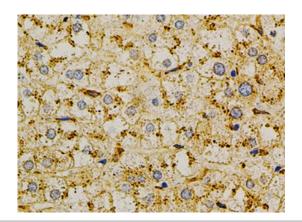
Cellular Localization

Lysosome, Secreted. [UniProt]



ARG58161 anti-PSAP antibody ICC/IF image

 $Immun of luorescence: MCF7\ cells\ stained\ with\ ARG58161\ anti-PSAP\ antibody.$



ARG58161 anti-PSAP antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver stained with ARG58161 anti-PSAP antibody at 1:200 dilution.



ARG58161 anti-PSAP antibody WB image

Western blot: 25 μg of 293T cell lysate stained with ARG58161 anti-PSAP antibody at 1:1000 dilution.