

Rabbit anti-Human PSPH Monoclonal Antibody | anti-PSPH antibody

Recombinant Anti-PSPH Antibody, Rabbit Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255681	Rabbit	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, ELISA, Western Blot

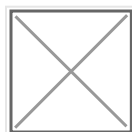
PRODUCT SYNONYMS

PSPH; Monoclonal Antibody; Recombinant Anti-PSPH Antibody; Rabbit Monoclonal; PSPH Antibody; Rabbit MAb; phosphoserine phosphatase; Anti-PSP Antibody; Anti-PSPHD Antibody; anti-PSPH antibody

PRODUCT SPECIFICATIONS

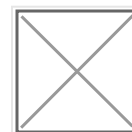
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	001
Specificity	Human PSPH
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-PSPH antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Human PSPH protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human PSPH (rh PSPH).
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



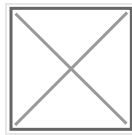
IF (Immunofluorescence)

Immunofluorescence staining of Human PSPH in A549 cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human PSPH monoclonal antibody (dilution ratio 1:60) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 594-conjugated Goat Anti-rabbit IgG secondary antibody (red) and counterstained with DAPI (blue).



IP (Immunoprecipitation)

PSPH was immunoprecipitated using: Lane A: 0.5 mg K562 Whole Cell Lysate Lane B: 0.5 mg HepG2 Whole Cell Lysate 0.5 uL anti-PSPH rabbit monoclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-PSPH rabbit monoclonal antibody, at 1:1000 dilution Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the odssey technique. Performed under reducing conditions. Predicted band size: 25 kDa Observed band size: 25 kDa



WB (Western Blot)

Anti-PSPH rabbit monoclonal antibody at 1:500 dilutionLane A: MCF7 Whole Cell LysateLane B: K562 Whole Cell LysateLane C: HepG2 Whole Cell LysateLysates/proteins at 30 ug per lane.SecondaryGoat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.Developed using the Odyssey technique.Performed under reducing conditions.Predicted band size:25 kDaObserved band size:27 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-PSPH antibody	Phosphoserine phosphatase (PSPH) belongs to a subfamily of the phosphotransferases. PSPH is the rate-limiting enzyme in l-serine biosynthesis. It has previously been found that Phosphoserine phosphatase (PSPH) plays a role in epidermal homeostasis. Phosphoserine phosphatase (PSP) catalyzes the hydrolysis of phosphoserine to serine. Phosphoserine phosphatase (PSPH) expression has been examined in human-mouse somatic cell hybrids retaining different combination of human chromosomes. Phosphoserine phosphatase (PSPH) is expressed throughout the proliferative layer of the epidermis and hair follicles in rodent and human skin and is highly induced in SCC. In keratinocytes, Phosphoserine phosphatase (PSPH) is a cytoplasmic protein that primarily localizes to endosomes and is present primarily as a homodimer. Knock down of Phosphoserine phosphatase (PSPH) dramatically diminished SCC cell proliferation and cyclin D1 levels in the presence of exogenous of l-serine production suggesting a non-canonical role for Phosphoserine phosphatase (PSPH) in epithelial carcinogenesis. Phosphoserine phosphatase (PSPH) is highly induced in proliferative normal keratinocytes and skin tumors. Phosphoserine phosphatase (PSPH) appears to be critical for the proliferation of SCC cells; however, this phenomenon may not involve the phosphoserine metabolic pathway.
References	Bachelor MA, et al. (2011) L-3-Phosphoserine phosphatase (PSPH) regulates cutaneous squamous cell carcinoma proliferation independent of L-serine biosynthesis. J Dermatol Sci. 63(3): 164-72.Koch GA, et al. (1983) Assignment of the human phosphoserine phosphatase gene (PSP) to the pter leads to q22 region of chromosome 7. Cytogenet Cell Genet. 35(1): 67-9.Jaeken J, et al. (1997) Phosphoserine phosphatase deficiency in a patient with Williams syndrome. J Med Genet. 34(7): 594-6.

NCBI AND UNIPROT INFORMATION

NCBI GI #	46249388
NCBI GeneID	5723
NCBI Accession #	NP_004568.2
NCBI GenBank Nucleotide #	NM_004577.3
UniProt Accession #	P78330; Q7Z3S5; B2RCR5
Molecular Weight	25,008 Da
NCBI Official Full Name	phosphoserine phosphatase
NCBI Official Synonym Full Names	phosphoserine phosphatase
NCBI Official Symbol	PSPH
NCBI Official Synonym Symbols	PSP; PSPHD
NCBI Protein Information	phosphoserine phosphatase; L-3-phosphoserine phosphatase; O-phosphoserine phosphohydrolase; PSPase
UniProt Protein Name	Phosphoserine phosphatase
UniProt Gene Name	PSPH
UniProt Synonym Gene Names	PSP; PSPase
UniProt Entry Name	SERB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/psph-antibody-clone-001-immunoprecipitation-immunofluorescence-immunocytochemistry-western-blot-elisa/255681>