

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody

Selenophosphate Synthetase 1 Antibody Catalog # ASR3732

Specification

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Mouse Mouse Polyclonal WB, E, IP, I, LCI This antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 43 kDa in size corresponding to SPS1 by western blotting in the appropriate cell lysate or extract
Physical State Buffer	Lyophilized 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a full-length recombinant protein corresponding to mouse SPS1.
Reconstitution Volume	100 uL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Additional Information

Gene ID 109079

Other Names 109079

Purity

This antibody is directed against mouse SPS1. The product is delipidated and defibrinated antiserum. A BLAST analysis was used to suggest cross-reactivity with SPS1 from mouse, human and rat based on a 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.



Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Protein Information

Name Sephs1

Synonyms Sps1

Function Synthesizes selenophosphate from selenide and ATP.

Cellular Location Cell membrane {ECO:0000250|UniProtKB:P49903}; Peripheral membrane protein. Nucleus membrane {ECO:0000250|UniProtKB:P49903}; Peripheral membrane protein

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Images



Western blot using Rockland's anti-SPS1 antibody shows detection of endogenous SPS1 in NIH3T3 cell (lane 1), mouse kidney, and liver tissue lysates (lanes 3-4). No signal is seen in NIH3T3 cells after pre-treatment with SPS1 siRNA (lane 2). SPS1 control (lane 5-6). Negligible cross-reactivity is seen against recombinant SPS2 (lane 7). The primary antibody was used at a 1:1000 dilution. Personal Communication, D. Hatfield, NCI, Bethesda, MD.

Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - Background



This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Selenophosphate synthetase 1 (SPS1) (also known as selinide water dikinase or selenium donor protein 1) is the homolog of the SelD gene product in E. coli. In E. coli, SelD generates the selenium donor for selenocysteine tRNA biosynthesis. The function of SPS1 in mammals is still unknown but appears to differ from that of E. coli SelD.