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Datasheet for 100-401-A22

Selenophosphate Synthetase 1 Antibody

Overview

Description:	Anti-Selenophosphate Synthetase 1 (SPS1) (RABBIT) Antibody - 100-401-A22
Item No.:	100-401-A22
Size:	100 µL
Applications:	ELISA, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-Selenophosphate Synthetase 1 Antibody, rabbit anti-SPS1 antibody, Selenide water dikinase 1, Selenophosphate synthetase 1, Selenium donor protein 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	Sephs1
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a full-length recombinant protein corresponding to mouse SPS1.

Purity/Specificity:	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.
Relevant Links:	• UniProtKB - Q8BH69 • NCBI - AAH66037.1 • GeneID - 109079

Application Details

Tested Applications:	ELISA, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:500 - 1:2,000

Formulation

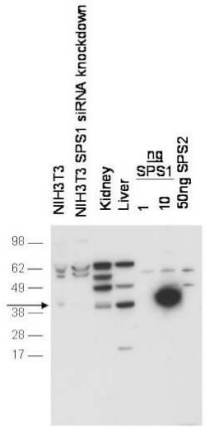
Physical State:	Lyophilized
Concentration:	85 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient

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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.