

Certificate of Analysis

Product: Affinity Purified Anti-Sipa1 [Rabbit]

Code: 600-401-A36

Lot # 19489

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 1.25 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions: Store vial at -20° C or below prior to opening. Dilute only prior to immediate use. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background Information: Sipa1 (signal-induced proliferation associated gene 1) is a mitogen-induced GTPase activating protein (GAP). It exhibits a specific GAP activity for Ras-related regulatory proteins Rap1 and Rap2, but not for Ran or other small GTPases. This protein may also hamper mitogen-induced cell cycle progression when abnormally or prematurely expressed. Sipa1 is localized to the perinuclear region. Two alternatively spliced variants encoding the same isoform have been characterized to date.

Application Note(s): This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 130 kDa in size corresponding to Sipa1 by western blotting in the appropriate cell lysate or extract. This antibody is capable of detecting both over-expressed and endogenous Sipa1.

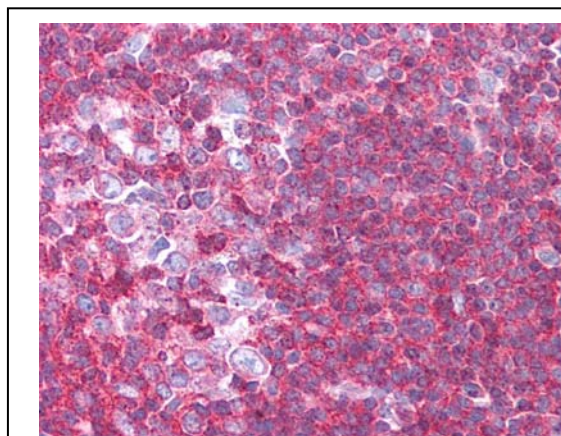
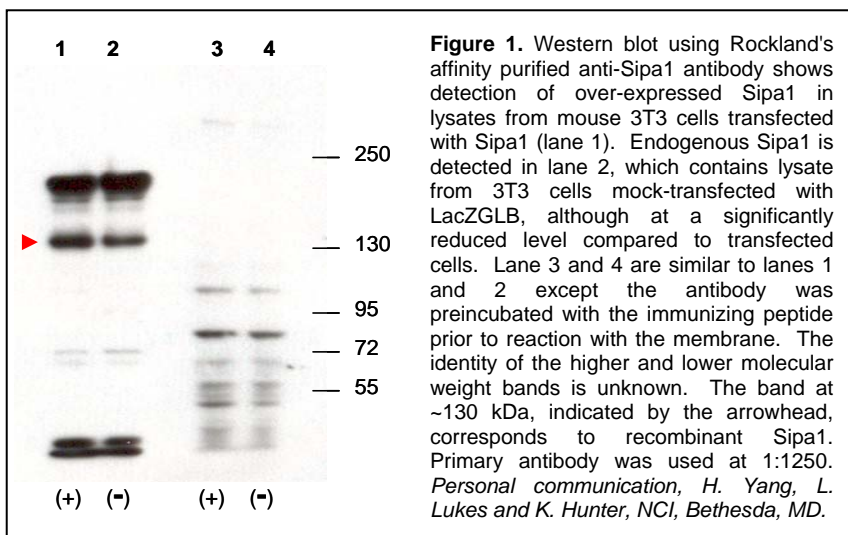


Figure 2. Immunohistochemistry. Rockland's affinity purified anti-Sipa1 antibody was used at 1.25 µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate to strong positive staining of lymphocytes within human tonsil at 40X. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. *Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.*

Recommended Dilutions:

ELISA	1:20,000
WESTERN BLOT	1:1,000 - 1:5,000
IMMUNOPRECIPITATION	User Optimized
IMMUNOHISTOCHEMISTRY	1.25-2.5 µg/ml
OTHER APPLICATIONS	User Optimized

Purity and Specificity: This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for mouse Sipa1 protein. A BLAST analysis was used to suggest cross-reactivity with Sipa1 from mouse, human and rat based on a 100% homology with the immunizing sequence. Cross-reactivity with Sipa1 from other sources has not been determined.

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the amino terminus of mouse Sipa1.

Relevant Links: NCBI [NP_035509](#) Swiss-Prot [P46062](#)

General References:

Kurachi, H., Wada, Y., Tsukamoto, N., Maeda, M., Kubota, H., Hattori, M., Iwai, K. & Minato, N. (1997) Human SPA-1 gene product selectively expressed in lymphoid tissues is a specific GTPase-activating protein for Rap1 and Rap2. Segregate expression profiles from a rap1GAP gene product. *J. Biol. Chem.* **272**, 28081-28088.

Farina, A., Hattori, M., Qin, J., Nakatani, Y., Minato, N. & Ozato, K. (2004) Bromodomain protein Brd4 binds to GTPase-activating SPA-1, modulating its activity and subcellular localization. *Mol. Cell Biol.* **24**, 9059-9069.

Tsukamoto, N., Hattori, M., Yang, H., Bos, J. L. & Minato, N. (1999) Rap1 GTPase-activating protein SPA-1 negatively regulates cell adhesion. *J. Biol. Chem.* **274**, 18463-18469.

Related Products:

#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#611-132-122	IRDye800™ Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#611-144-122	DyLight™680 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#B501-0500	BLOTTO (500 g)
#BSA-30	30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer) (500 ml)
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-003	MaxTag ™ Anti-RABBIT IgG Kit for Immunoblotting

Note: 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 326, Gilbertsville, Pennsylvania, USA.