

**Datasheet for 600-401-EY9****SYPL2 Antibody****Overview**

<b>Description:</b>	Anti-SYPL2 (RABBIT) Antibody - 600-401-EY9
<b>Item No.:</b>	600-401-EY9
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, IF, IHC, WB
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host Species:</b>	Rabbit

**Product Details**

**Background:** SYPL2, also known as Mitsugumin 29, was initially identified as a transmembrane protein from the triad junction in skeletal muscle that had significant homology with members of the synaptophysin family. SYPL2 is thought to participate in the excitation-contraction coupling process of skeletal muscle as SYPL2-null mice showed reduced muscle contractile force and altered triad junction structure and increased susceptibility to fatigue of the skeletal muscle. SYPL2 plays a critical role in muscle Ca<sup>2+</sup> signaling by regulating the process of store-operated Ca<sup>2+</sup> entry and interacts with ryanodine receptor (RyR), thereby influencing intracellular Ca<sup>2+</sup> homeostasis through changes in the RyR/Ca<sup>2+</sup> release function. Co-expression of SYPL2 and RyR in cultured cells leads to apoptotic cell death resulting from the depletion of Ca<sup>2+</sup> from the intracellular stores.

<b>Synonyms:</b>	SYPL2 Antibody, MG29, Synaptophysin-like protein 2
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	SYPL2
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	Anti-SYPL2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of human SYPL.
<b>Purity/Specificity:</b>	Anti-SYPL2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms of SYPL2 are known to exist. SYPL2 antibody will not cross-react with SYPL1.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q5VXT5</a></li><li>• <a href="#">GeneID - 284612</a></li><li>• <a href="#">NCBI - NP_001035799.1</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IF, IHC, WB
<b>Application Note:</b>	Anti-SYPL2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 30 kDa in Western Blots of specific cell lysates and tissues.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:10,000
<b>IF:</b>	20 µg/mL
<b>IHC:</b>	2.5 µg/mL
<b>WB:</b>	1 µg/mL

## Formulation

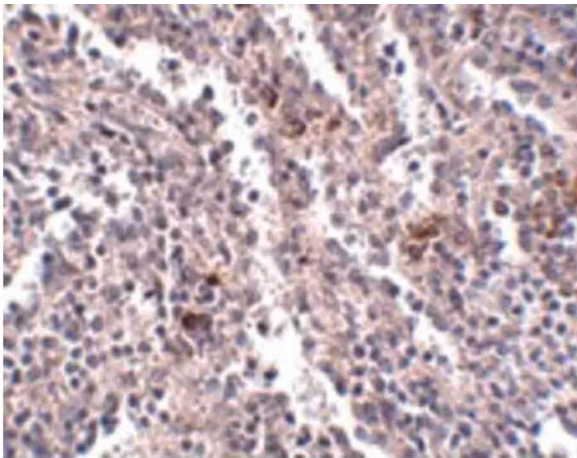
<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.02% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
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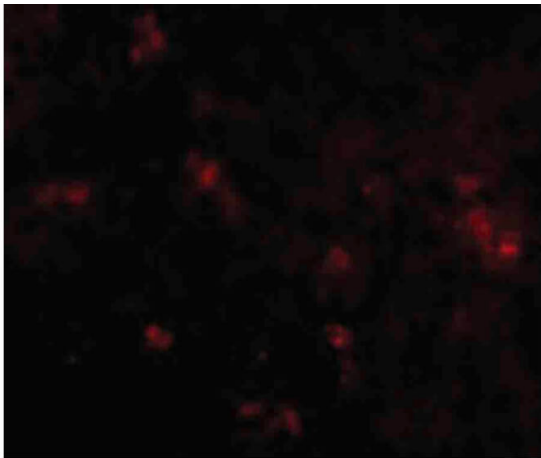
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



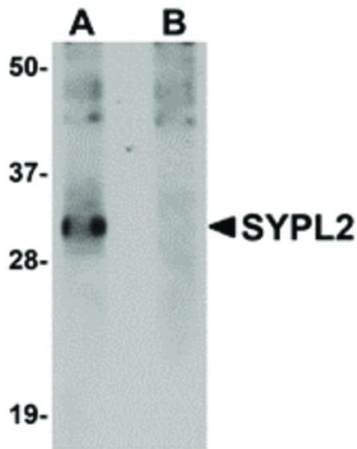
### Immunohistochemistry

Immunohistochemistry of SYPL2 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: SYPL2 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SYPL2 is nuclear and cytoplasmic. Staining: SYPL2 as precipitated brown signal with purple nuclear counterstain.



### Immunofluorescence Microscopy

Immunofluorescence Microscopy of SYPL2 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SYPL2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SYPL2 is nuclear and cytoplasmic. Staining: SYPL2 as red fluorescent signal.



#### Western Blot

Western Blot of SYPL2 antibody. Lane 1: Human Spleen tissue lysate in the absence of blocking peptide. Lane 2: Human Spleen tissue lysate in the presence of blocking peptide. Load: 35  $\mu$ g per lane. Primary Antibody: Anti-SYPL2 antibody at 1  $\mu$ g/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 30 kDa, 30 kDa for SYPL2. Other band(s): SYPL2 splice variants and isoforms.

## 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.