Datasheet for 600-401-EC3

RSPO1 Antibody

Overview

Description:	Anti-RSPO1 (RABBIT) Antibody - 600-401-EC3
Item No.:	600-401-EC3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	RSPO1 is a member of a family of secreted growth factors that can operate through the canonical Wnt signaling pathway by stabilizing the intracellular beta-catenin, thereby regulating functions mediated by beta-catenin such as cell fate decisions and embryonic patterning. RSPO1 was recently identified through linkage analysis to be involved in sex determination and mammalian ovarian development. RSPO1 is thought to regulate cellular responsiveness to Wnt ligands by modulating the cell-surface expression of the Wnt co-receptor LRP6 by interfering with the DKK/Kremen-mediated internalization of LRP6 through an interaction with Kremen, resulting in increased LRP6 cell-surface levels. At least two isoforms of RSPO1 are known to exist. RSPO1 antibody will not cross-react with RSPO family members.
Synonyms:	RSPO1 Antibody, RSPO, CRISTIN3, R-spondin-1, Roof plate-specific spondin-1, hRspo1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RSPO1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-RSPO1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the N-terminus of human RSPO1.
Purity/Specificity:	Anti-RSPO1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with RSPO1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q2MKA7 • GeneID - 284654 • NCBI - NP_001033722

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-RSPO1 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 29 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	5 µg/mL
IHC:	2.5-5 µg/mL
WB:	1-2 µg/mL

Formulation

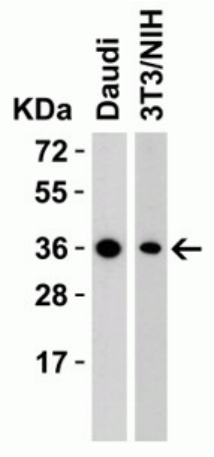
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

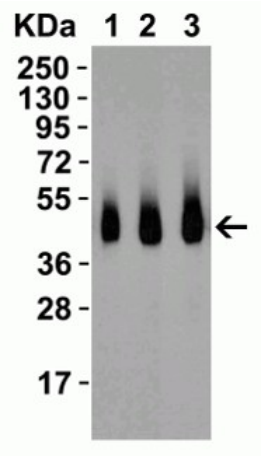
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

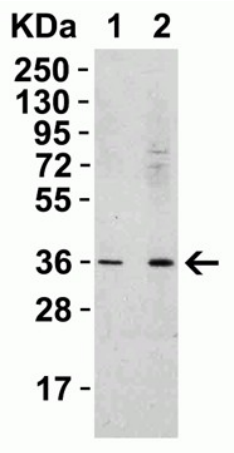
Images



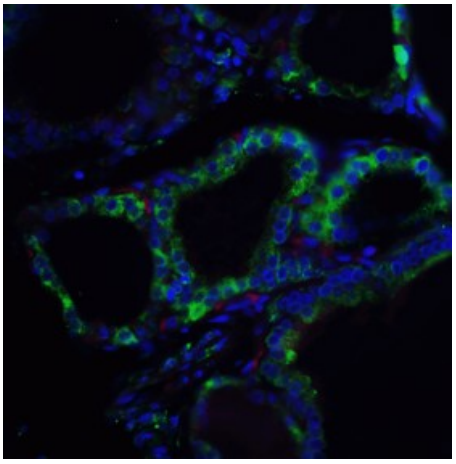
Western Blot
Western Blot Validation using RSPO1. Loading: 15 µg of Human and Mouse Cell Line lysates per lane. Antibodies: RSPO1 (2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



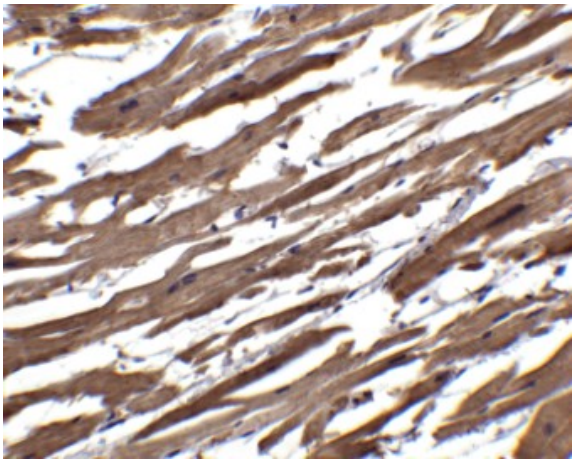
Western Blot
Western Blot Validation using RSPO1. Loading: 30 ng of human RSPO1 recombinant protein per lane. Antibodies: RSPO1, (Lane 1: 0.5 µg/mL, Lane 2: 1 µg/mL, Lane 3: 2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



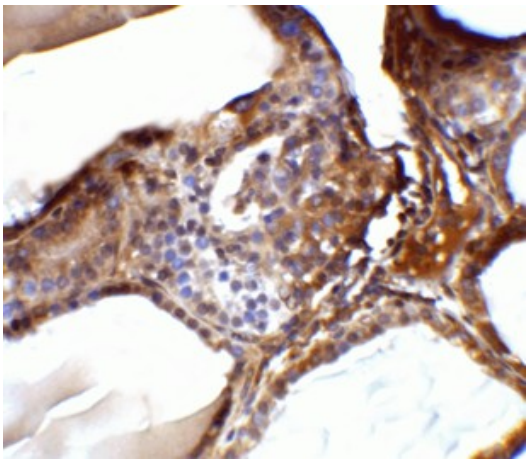
Western Blot
Western Blot Validation using RSPO1. Loading: 15 µg of in Human Spleen lysates per lane. Antibodies: RSPO1, (Lane 1: 0.5 µg/mL, Lane 2: 1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



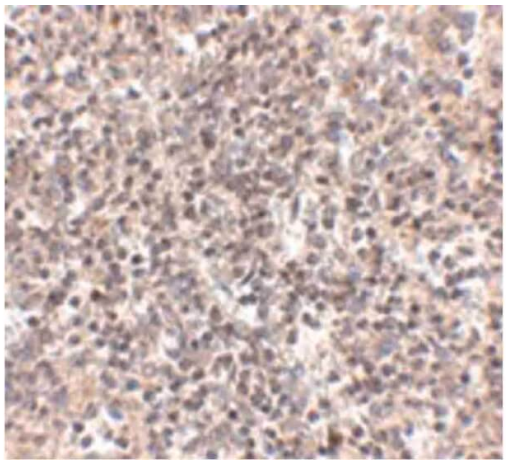
Immunofluorescence Microscopy
Immunofluorescence Validation of RSPO1.
Immunofluorescent analysis of 4% paraformaldehyde-fixed human spleen labeling RSPO1 at 5 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) with Phylloidin staining (red) and DAPI staining (blue).



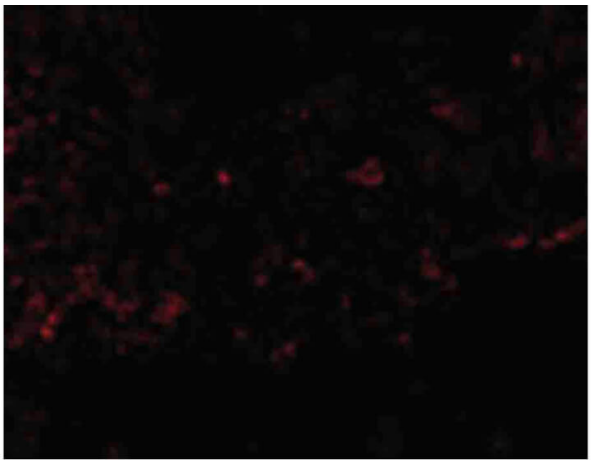
Immunohistochemistry
Immunohistochemistry Validation of RSPO1.
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue using anti-RSPO1 antibody at 2.5 µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



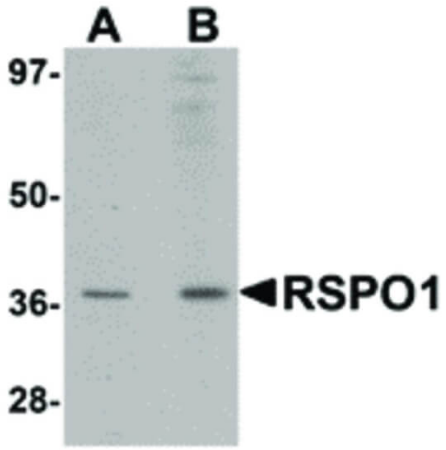
Immunohistochemistry
Immunohistochemistry Validation of RSPO1. Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-RSPO1 antibody at 5 µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry
Immunohistochemistry of RSPO1 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: RSPO1 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: RSPO1 is secreted into extracellular regions. Staining: RSPO1 as precipitated brown signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of RSPO1 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: RSPO1 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: RSPO1 is secreted into extracellular regions. Staining: RSPO1 as red fluorescent signal.



Western Blot

Western Blot of RSPO1 antibody. Lane 1: Rat spleen tissue lysate with RSPO1 antibody at 1 µg/mL. Lane 2: Rat spleen tissue lysate with RSPO1 antibody at 2 µg/mL. Load: 35 µg per lane. 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: 29 kDa, 37 kDa for RSPO1. Other band(s): RSPO1 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.