

Datasheet for 600-401-697**Sprouty-4 Antibody****Overview**

Description:	Anti-Sprouty-4 (RABBIT) Antibody - 600-401-697
Item No.:	600-401-697
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Sprouty-4 (also known as SPRY4) is an inhibitor of the insulin receptor and EGFR-transduced mitogen-activated protein kinase (MAPK) signaling pathway downstream of FGF and EGF receptor tyrosine kinase activation. It is positioned upstream of RAS activation and impairs the formation of active GTP-RAS. SPRY4 is widely expressed, with different isoforms. The protein consists of 322 amino acids, with a cysteine-rich region, Src homology 3 binding regions, proline-rich regions, and a PEST sequence. It is expressed predominantly in the cytoplasm. Northern results show bands across most tissues, with strongest expression in heart, brain, placenta, lung, and intestine.
Synonyms:	Rabbit anti-Sprouty4 antibody, Rabbit anti-Sprouty-4 antibody, Sprouty 4, SPRY4, SPRY 4, Spry-4, Protein sprouty homolog 4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SPRY4
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region near amino acids 275-299 of Human Sprouty-4 protein.
Purity/Specificity:	This affinity purified antibody is directed against human Sprouty-4 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human and chimpanzee based on 100% homology for the immunogen sequence. Cross reactivity is expected with Sprouty-4.
Relevant Links:	• NCBI - NP_001120968.1 • UniProtKB - Q9C004 • GeneID - 81848

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band (maybe a doublet) ~35 kDa in size corresponding to Sprouty-4 by western blotting in the appropriate cell lysate or extract. Some non-specific banding may be observed using this antibody.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:3,000 - 1:12,000
IHC:	1 µg/ml to 10 µg/ml
WB:	1:100 - 1:1,000

Formulation

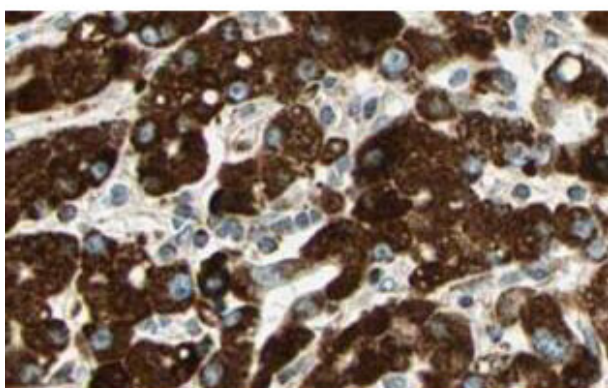
Physical State:	Liquid (sterile filtered)
Concentration:	1.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

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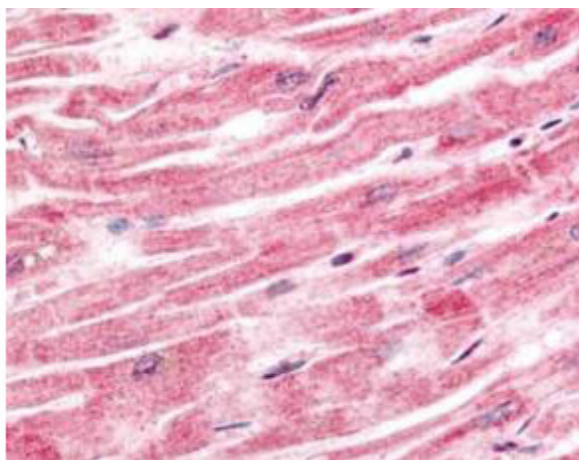
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Images



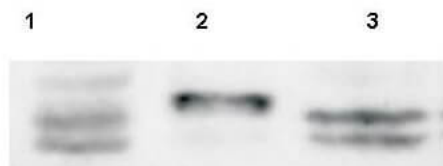
Immunohistochemistry

Immunohistochemistry of Rabbit anti-Sprouty-4 antibody.
 Tissue: human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Sprouty-4 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: Sprouty-4 is cytoplasmic. Staining: Sprouty-4 as precipitated brown with blue nuclear counterstain.



Immunohistochemistry

Immunohistochemistry of Rabbit anti-Sprouty-4 antibody.
 Tissue: human heart tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Sprouty-4 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: Sprouty-4 is cytoplasmic. Staining: Sprouty-4 as precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of Rabbit anti-Sprouty-4 antibody. Lane 1: HeLa (p/n W09-000-364). Lane 2: SW13. Lane 3: C2C12 (p/n W10-001-GL7). Load: 30 µg per lane. Primary antibody: Sprouty 4 antibody at 1:100 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:5,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C. Predicted/Observed size: a doublet band ~35 kDa corresponding to human Sprouty-4. Other band(s): none.

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.