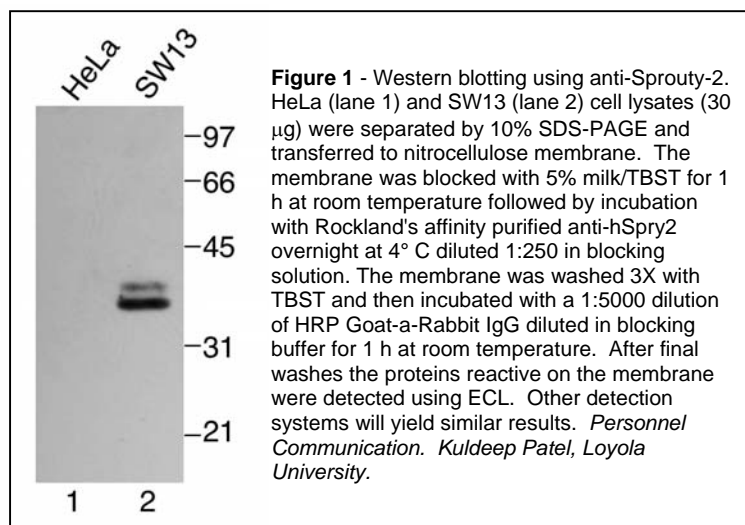


Certificate of Analysis**Product:** Affinity Purified Anti-Human Sprouty-2 (Rabbit)**Code:** 600-401-241**Lot #:** 16010**Size:** 100 µg**Physical State:** Liquid (sterile filtered)**Antibody Concentration:** 0.37 mg/ml (by UV absorbance at 280 nm)**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**Stabilizer:** None**Preservative:** 0.01% (w/v) Sodium Azide

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

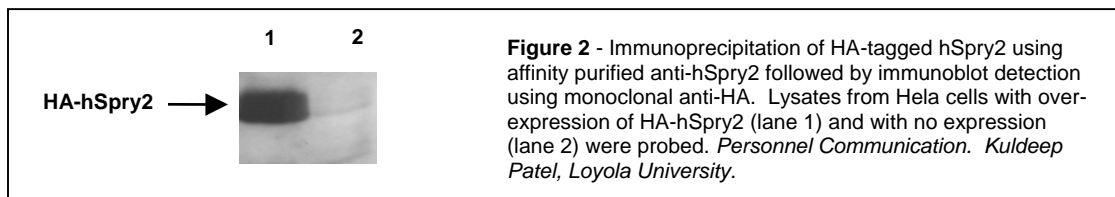
Background Information: Sprouty was originally identified as an inhibitor of *Drosophila* epidermal growth factor (EGF) and fibroblast growth factor (FGF) receptor signaling during tracheal development. Four isoforms of mammalian sprouty are known (Spry1-Spry4). The role of the mammalian analogs has not been clearly elucidated although it is believed that human Sprouty-2 (hSpry2) may be an inhibitor of cellular migration and proliferation. Spry2 and Spry4 show considerable sequence homology between human and mouse at the C-terminus of the protein. Significant sequence divergence occurs at the N-terminus. Spry2 appears to be abundant in brain, lung and heart tissue, with lesser amounts found in kidney and skeletal muscle.



Application Note(s): This antibody reacts with human Sprouty-2 protein and is useful for determining its presence in ELISA, immunoblotting and immunoprecipitation. Approximately 20 µl of antibody is used to immunoprecipitate hSpry2 protein from 1 mg of a HeLa cell lysate over expressing Sprouty-2 in 1 ml. Incubate the antibody for 2 h with the cell lysate. Immunoprecipitate the complex with Protein G agarose. Reactivity in other immunoassays has not yet been fully determined. A 38 kDa band corresponding to human Sprouty-2 is observed

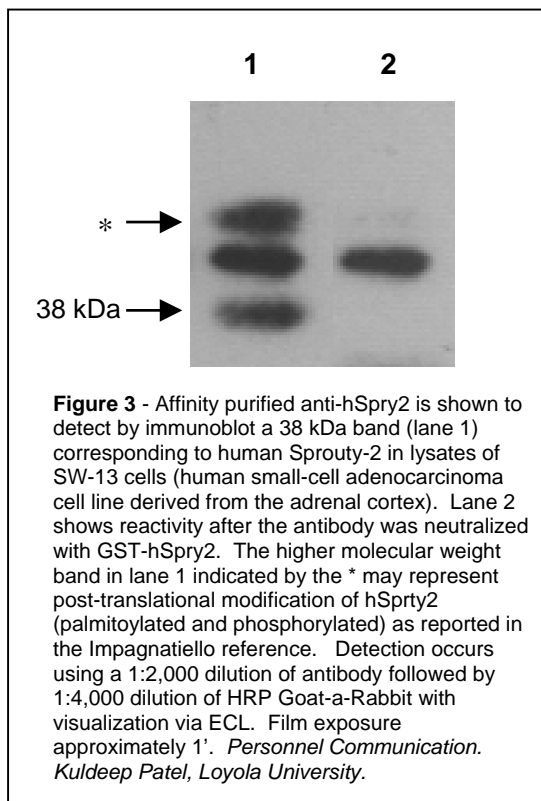
Recommended Dilutions:

ELISA	1:2,000 - 1:10,000
WESTERN BLOT	1:200 - 1:2,000
IMMUNOHISTOCHEMISTRY	User Optimized
OTHER APPLICATIONS	User Optimized



Purity and Specificity: This product was prepared from monospecific antiserum by immunoaffinity chromatography using GST-hSpry2 protein coupled to agarose beads followed exhaustive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum.

Immunogen: This affinity-purified antibody was prepared from rabbit serum by repeated immunizations with HisX6 tagged full-length human Sproutly-2 protein.



Specific Reference(s):

Zhang, C., Chaturvedi, D. Jaggar, L., Magnuson, D., Lee, J. and Patel, T.B. (2005) Regulation of Vascular Smooth Muscle Cell Proliferation and Migration by Human Sproutly 2. *Arterioscler Thromb Vasc Biol* **25**: 533 - 538.

General Reference(s):

Yigzaw, Y. et al. (2001) The Carboxy Terminus of Sproutly is Important for Modulation of Cellular Migration and Proliferation. *J. Biol. Chem.* **276**, 22742-22747.

Reich, A. et al. (1999) Sproutly is a general inhibitor of receptor tyrosine kinase signaling. *Development* **126** (18) 4139-4147.

Hacohen, N. et al. (1998) Sproutly encodes a novel antagonist of FGF signaling that patterns apical branching of the *Drosophila* airways. *Cell* **92**: 253-263

Minowada G, et al. (1999) Vertebrate Sproutly genes are induced by FGF signaling and can cause chondrodysplasia when overexpressed. *Development* **126**: 4465-4475.

Chambers D and Mason, I, (2000) Expression of sproutly2 during early development of the chick embryo is coincident with known sites of FGF signaling. *Mech Dev*, **91**(1-2):361-4.

Impagnatiello, M-A. et al. (2001) Mammalian Sproutly-1 and 2 are integral membrane inhibitors of growth factor signalling in endothelial cells. *J. Cell Biol.* **152**, 1087-1098.

Relevant Links:

Sproutly-2 homology to [mouse sequence](#).

Search for Sproutly at www.cellularsignaling.org

Related Products:

#600-401-241	Affinity Purified Anti-Human Sproutly-2 (Rabbit)
#600-401-697	Affinity Purified Anti-Human Sproutly-4 (Rabbit)
#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#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
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-003	MaxTag TM Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

USDA Certification: 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.

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