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antibody and ELISA experts

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Anti-Sprouty 4/Spry-4/SPRY4 Antibody Picoband™

Catalog Number: A04343-2

About SPRY4

Protein sprouty homolog 4 is a protein that in humans is encoded by the SPRY4 gene. It is mapped to 5q31.3. This gene encodes a member of a family of cysteine- and proline-rich proteins. The encoded protein is an inhibitor of the receptor-transduced mitogen-activated protein kinase (MAPK) signaling pathway. Activity of this protein impairs the formation of active GTP-RAS. Nucleotide variation in this gene has been associated with hypogonadotropic hypogonadism 17 with or without anosmia. Alternative splicing results in a multiple transcript variants.

Overview

Product Name	Anti-Sprouty 4/Spry-4/SPRY4 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Sprouty 4/Spry-4/SPRY4 Antibody Picoband™ catalog # A04343-2. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9C004

Technical Details

Immunogen	E.coli-derived human Sprouty 4/Spry-4/SPRY4 recombinant protein (Position: M1-K297).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

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	kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Flow Cytometry, 1-3ug/1x10^6 cells, Human Direct ELISA, 0.1-0.5ug/ml, Human

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Anti-Sprouty 4/Spry-4/SPRY4 Antibody Picoband™ (A04343-2) Images

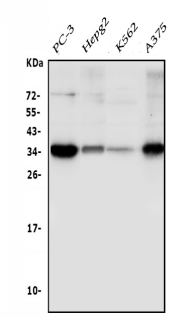

Figure 1. Western blot analysis of Sprouty 4/Spry-4/SPRY4 using anti-Sprouty 4/Spry-4/SPRY4 antibody (A04343-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human PC-3 whole cell lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: human K562 whole cell lysates,
Lane 4: human A375 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Sprouty 4/Spry-4/SPRY4 antigen affinity purified polyclonal antibody (Catalog # A04343-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Sprouty 4/Spry-4/SPRY4 at approximately 35KD. The expected band size for Sprouty 4/Spry-4/SPRY4 is at 35KD.

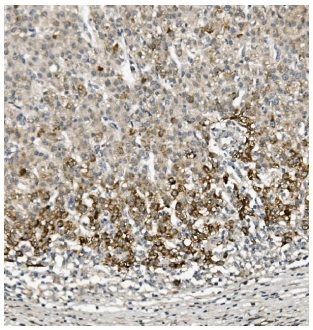

Figure 2. IHC analysis of Sprouty 4/Spry-4/SPRY4 using anti-Sprouty 4/Spry-4/SPRY4 antibody (A04343-2).
Sprouty 4/Spry-4/SPRY4 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Sprouty 4/Spry-4/SPRY4 Antibody (A04343-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

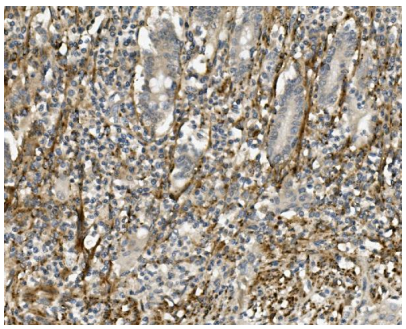

Figure 3. IHC analysis of Sprouty 4/Spry-4/SPRY4 using anti-Sprouty 4/Spry-4/SPRY4 antibody (A04343-2).
Sprouty 4/Spry-4/SPRY4 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Sprouty 4/Spry-4/SPRY4 Antibody (A04343-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

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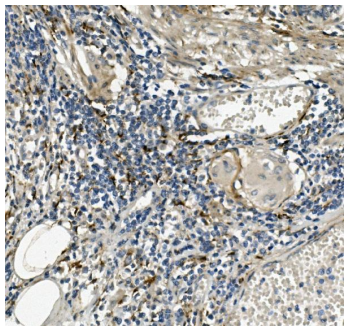

Figure 4. IHC analysis of Sprouty 4/Spry-4/SPRY4 using anti-Sprouty 4/Spry-4/SPRY4 antibody (A04343-2).
Sprouty 4/Spry-4/SPRY4 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Sprouty 4/Spry-4/SPRY4 Antibody (A04343-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

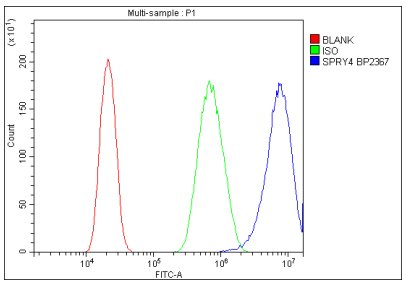

Figure 5. Flow Cytometry analysis of PC-3 cells using anti-Sprouty 4/Spry-4/SPRY4 antibody (A04343-2).
Overlay histogram showing PC-3 cells stained with A04343-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Sprouty 4/Spry-4/SPRY4 Antibody (A04343-2,1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.