BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

# Anti-SMARCAD1 Antibody Picoband®

**Catalog Number:** A06049-1-carrier-free

## About SMARCAD1

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A containing DEAD/H box 1 is a protein that in humans is encoded by the SMARCAD1 gene. It is mapped to 4q22.3. This gene encodes a member of the SNF subfamily of helicase proteins. The encoded protein plays a critical role in the restoration of heterochromatin organization and propagation of epigenetic patterns following DNA replication by mediating histone H3/H4 deacetylation. Mutations in this gene are associated with adermatoglyphia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

## Overview

| | |
|---|---|
| Product Name | Anti-SMARCAD1 Antibody Picoband® |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-SMARCAD1 Antibody Picoband® catalog # A06049-1. Tested in ELISA, Flow Cytometry, IP, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |
| Application | ELISA, Flow Cytometry, IP, IF, IHC, ICC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| 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 | Q9H4L7 |

## Technical Details

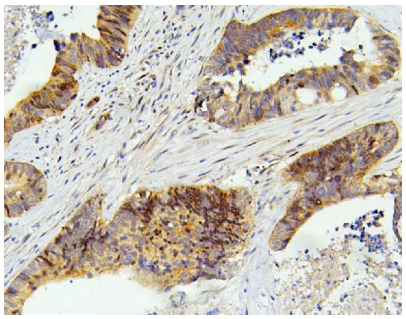
| | |
|---|---|
| Immunogen | E.coli-derived human SMARCAD1 recombinant protein (Position: D827-T1002). |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC. |
| 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. |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

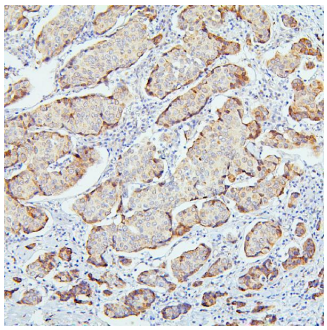
| | |
|---|---|
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.1-0.5ug/ml<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml<br>Immunocytochemistry/Immunofluorescence, 2ug/ml<br>Immunoprecipitation, 0.5-2 ug/ml, Human<br>Flow Cytometry (Fixed), 1-3ug/1x$10^6$ cells ELISA, 0.1-0.5ug/ml |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

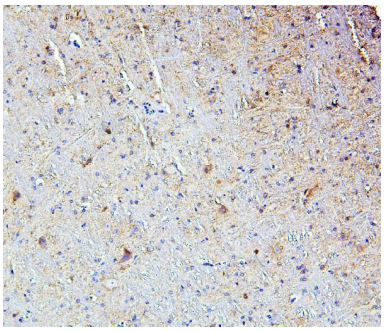
# Anti-SMARCAD1 Antibody Picoband® (A06049-1-carrier-free) Images



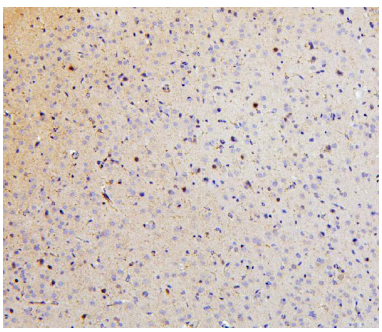
IHC analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). SMARCAD1 was detected in paraffin-embedded section of human colon cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SMARCAD1 Antibody (A06049-1) 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.



IHC analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). SMARCAD1 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SMARCAD1 Antibody (A06049-1) 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.

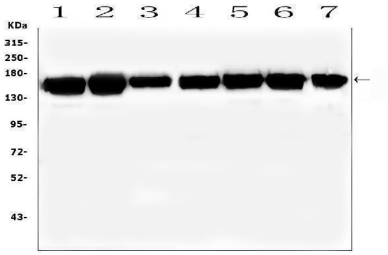


IHC analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). SMARCAD1 was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SMARCAD1 Antibody (A06049-1) 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.

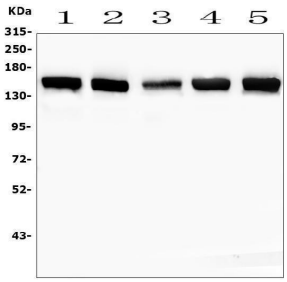


IHC analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). SMARCAD1 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SMARCAD1 Antibody (A06049-1) 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.

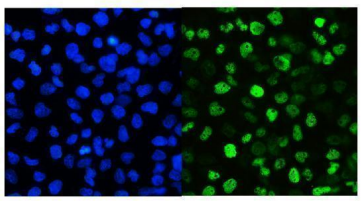
BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com




Western blot analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). 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 K562 whole cell lysates, Lane 2: human HL-60 whole cell lysates, Lane 3: human U2OS whole cell lysates, Lane 4: human U-87MG whole cell lysates, Lane 5: human HepG2 whole cell lysates, Lane 6: human THP-1 whole cell lysates, Lane 7: human A549 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-SMARCAD1 antigen affinity purified polyclonal antibody (Catalog # A06049-1) 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 SMARCAD1 at approximately 150KD. The expected band size for SMARCAD1 is at 117KD.

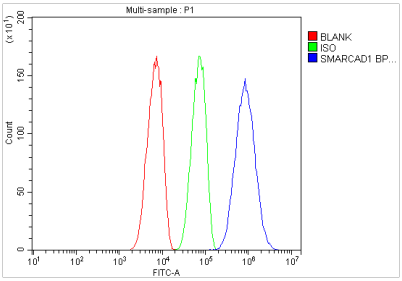



Western blot analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat testicular tissue lysates, Lane 2: mouse thymus tissue lysates, Lane 3: mouse lung tissue lysates, Lane 4: mouse testicular tissue lysates, Lane 5: mouse kidney tissue 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-SMARCAD1 antigen affinity purified polyclonal antibody (Catalog # A06049-1) 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 SMARCAD1 at approximately 150KD. The expected band size for SMARCAD1 is at 117KD.

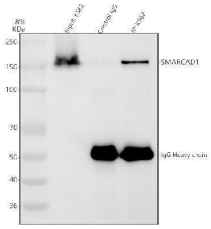


IF analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1). SMARCAD1 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-SMARCAD1 Antibody (A06049-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was

counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.




Flow Cytometry analysis of SiHa cells using anti-SMARCAD1 antibody (A06049-1). Overlay histogram showing SiHa cells stained with A06049-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SMARCAD1 Antibody (A06049-1, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.




Immunoprecipitating SMARCAD1 in K562 whole cell lysate.Western blot analysis of SMARCAD1 using anti-SMARCAD1 antibody (A06049-1).Lane 1: K562 whole cell lysates (30ug)Lane 2: Rabbit control IgG instead of anti-SMARCAD1 antibody in K562 whole cell lysate.Lane 3: anti-SMARCAD1 antibody (2ug) + K562 whole cell lysate (500ug)After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SMARCAD1 antigen affinity purified polyclonal antibody (A06049-1) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for SMARCAD1 at approximately 150 kDa. The expected band size for SMARCAD1 is at 117 kDa.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-SMARCAD1 Antibody

For Research Use Only. Not for use in diagnostic procedures.