

Anti-14-3-3 sigma/SFN Antibody Picoband™

Catalog Number: A01127

About SFN

Stratifin (SFN), also known as 14-3-3 protein sigma, is strongly induced by gamma irradiation and other DNA-damaging agents. The induction of 14-3-3-sigma is mediated by a p53 -responsive element located 1.8 kb upstream of its transcription start site. The protein, called stratifin, was shown to be diffusely distributed in the cytoplasm and was present in cultured epithelial cells. It was most abundant in tissues enriched in stratified keratinizing epithelium.

Overview

Product Name	Anti-14-3-3 sigma/SFN Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-14-3-3 sigma/SFN Antibody Picoband™ catalog # A01127. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO 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	P31947

Technical Details

Immunogen	E. coli-derived human 14-3-3 sigma recombinant protein (Position: M1-S248).
Predicted Reactive Species	Human
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), IHC(F) 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.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml</p> <p>Immunocytochemistry, 0.5-1ug/ml</p> <p>Flow Cytometry, 1-3ug/1x10⁶ cells</p> <p>Immunofluorescence, 2ug/ml</p> <p>Direct ELISA, 0.1-0.5ug/ml</p>

Anti-14-3-3 sigma/SFN Antibody Picoband™ (A01127) Images

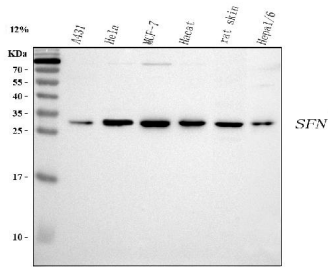


Figure 1. Western blot analysis of 14-3-3 sigma using anti-14-3-3 sigma antibody (A01127). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,
Lane 2: human HeLa whole cell lysates,
Lane 3: human MCF-7 whole cell lysates,
Lane 4: human Hec1 whole cell lysates,
Lane 5: rat skin tissue lysates,
Lane 6: mouse Hepa1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-14-3-3 sigma antigen affinity purified polyclonal antibody (Catalog # A01127) 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 1:5000 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 14-3-3 sigma at approximately 28 kDa. The expected band size for 14-3-3 sigma is at 28 kDa.

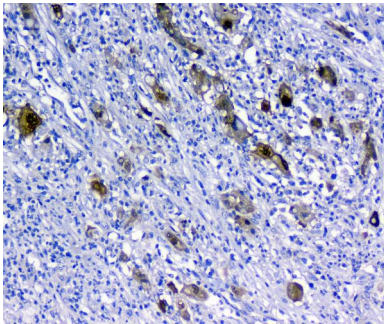


Figure 2. IHC analysis of 14-3-3 sigma using anti-14-3-3 sigma antibody (A01127).

14-3-3 sigma was detected in paraffin-embedded section of human rectal 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-14-3-3 sigma Antibody (A01127) 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 Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

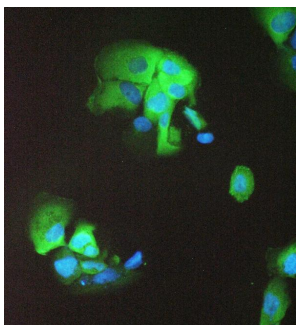


Figure 3. IF analysis of 14-3-3 sigma using anti-14-3-3 sigma antibody (A01127).

14-3-3 sigma was detected in paraffin-embedded section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/mL rabbit anti-cortactin Antibody (A01127) 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. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

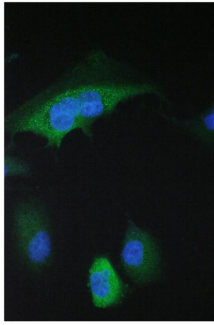


Figure 4. IF analysis of 14-3-3 sigma using anti-14-3-3 sigma antibody (A01127).

14-3-3 sigma was detected in paraffin-embedded section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/mL rabbit anti-cortactin Antibody (A01127) 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. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

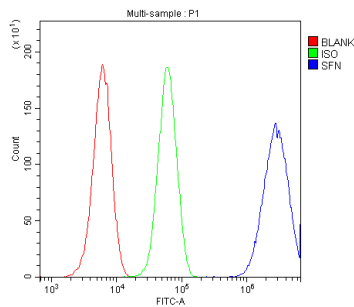


Figure 5. Flow Cytometry analysis of U20S cells using anti-14-3-3 SIGMA antibody (A01127).

Overlay histogram showing U20S cells stained with A01127 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-14-3-3 SIGMA Antibody (A01127, 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 (Red line) was also used as a control.

1 Publications Citing This Product

1. PubMed ID: 18198183, Makorin-2 Is a Neurogenesis Inhibitor Downstream of Phosphatidylinositol 3-Kinase/Akt (PI3K/Akt) Signal

Visit bosterbio.com/anti-14-3-3-sigma-picoband-trade-antibody-a01127-boster.html to see all 1 publications.

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