BOSTER
antibody and ELISA experts

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Anti-Hsp105/HSPH1 Antibody Picoband™

Catalog Number: A04168

About HSPH1

HSP105 (HEAT-SHOCK 105/110-KD PROTEIN 1), also called HSPH1 or HSP110, is a protein that in humans is encoded by the HSPH1 gene. Immunohistochemical analysis localizes HSP105 mainly in the cytoplasm. Database analysis indicates that both HSP105 isoforms are highly conserved during evolution. By analysis of radiation hybrids and human/rodent hybrid cell lines, the HSPH1 gene is mapped to chromosome 13. Both HSP105-alpha and HSP105-beta are upregulated in HeLa cells exposed to heat shock. HSP105-alpha, but not HSP105-beta, is also upregulate in response to other cell stresses. Following heat shock, HSP105 relocalizes from a cytoplasmic to perinuclear position. Besides, HSP110 may thus constitute a major determinant for both prognosis and treatment response in colorectal cancer.

Overview

Product Name	Anti-Hsp105/HSPH1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Hsp105/HSPH1 Antibody Picoband™ catalog # A04168. Tested in ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, 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	Q92598

Technical Details

Immunogen	E. coli-derived human Hsp105 recombinant protein (Position: Y653-D858).
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.

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Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this 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, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunohistochemistry (Frozen Section), 0.5-1ug/ml Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry, 1-3ug/1x10^6 cells Direct ELISA, 0.1-0.5ug/ml

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Anti-Hsp105/HSPH1 Antibody Picoband™ (A04168) Images

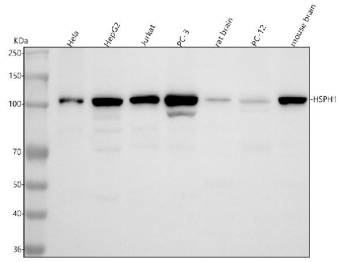

Figure 1. Western blot analysis of Hsp105 using anti-Hsp105 antibody (A04168).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human PC-3 whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat PC-12 whole cell lysates,
Lane 7: mouse brain tissue 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-Hsp105 antigen affinity purified polyclonal antibody (Catalog # A04168) 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 Hsp105 at approximately 105 kDa. The expected band size for Hsp105 is at 97 kDa.

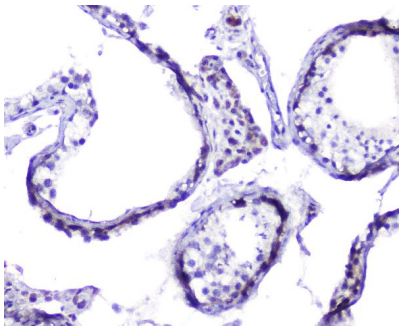

Figure 2. IHC analysis of Hsp105 using anti-Hsp105 antibody (A04168).
Hsp105 was detected in paraffin-embedded section of human testis tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hsp105 Antibody (A04168) 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.

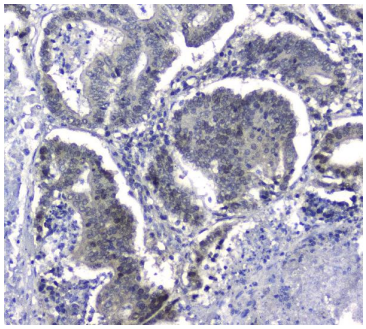

Figure 3. IHC analysis of Hsp105 using anti-Hsp105 antibody (A04168).
Hsp105 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hsp105 Antibody (A04168) 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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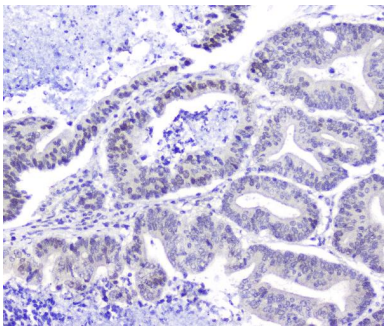

Figure 4. IHC analysis of Hsp105 using anti-Hsp105 antibody (A04168).
Hsp105 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hsp105 Antibody (A04168) 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.

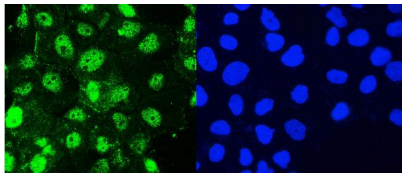

Figure 5. IF analysis of Hsp105 using anti-Hsp105 antibody (A04168).
Hsp105 was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Hsp105 Antibody (A04168) 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.

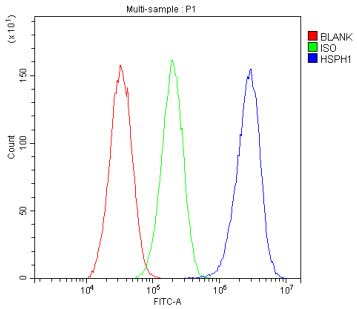

Figure 6. Flow Cytometry analysis of HepG2 cells using anti-Hsp105 antibody (A04168).
Overlay histogram showing HepG2 cells stained with A04168 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Hsp105 Antibody (A04168,1ug/1x10^6 cells) for 30 min at 20°C. 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.