

Product Datasheet

Hsp60/HSPD1 Antibody (monoclonal, 6G2) (orb570314)

Catalog Number orb570314

Category Antibodies

Description Anti-Hsp60/HSPD1 Antibody (monoclonal, 6G2). Tested in Flow Cytometry, IF,

IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

Clonality Monoclonal

Species/Host Mouse

Isotype Mouse IgG1

Conjugation Unconjugated

Reactivity Human, Mouse, Rat

Form/Appearance Lyophilized

Concentration Adding 0.2 ml of distilled water will yield a concentration of 500 μg/ml.

Purification Immunogen affinity purified.

Immunogen E.coli-derived human Hsp60/HSPD1 recombinant protein (Position: A260-Q496).

Human Hsp60 shares 97% amino acid (aa) sequence identity with both mouse

and rat Hsp60.

UniProt ID P10809

MW 60 kDa

Tested applications FC, ICC, IF, IHC, WB

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Application notes Western blot, 0.1-0.5μg/ml Immunohistochemistry (Paraffin-embedded Section),

 $0.5-1\mu g/ml$ Immunocytochemistry/Immunofluorescence, $5\mu g/ml$ Flow Cytometry (Fixed), $1-3\mu g/1x106$ cells. Add 0.2ml of distilled water will yield a concentration

of 500µg/ml

Cross Reactivity No cross-reactivity with other proteins.

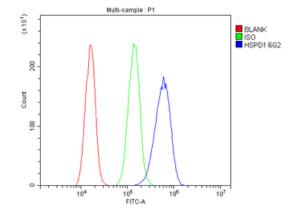
Antibody Type Primary Antibody

Clone Number 6G2

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -

20°C in small aliquots to prevent freeze-thaw cycles.

Note For research use only



Flow Cytometry analysis of A431 cells using anti-HSPD1 antibody. Overlay histogram showing A431 cells (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 mouse anti-HSPD1 Antibody (1 $\mu g/1x10^6$ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-mouse IgG (5-10 $\mu g/1x10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 $\mu g/1x10^6$) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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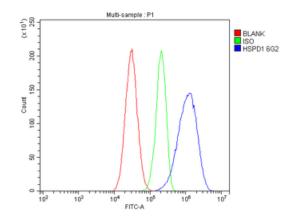
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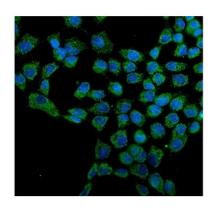
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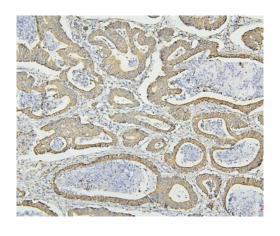




Flow Cytometry analysis of HepG2 cells using anti-HSPD1 antibody. Overlay histogram showing HepG2 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-HSPD1 Antibody (1 $\mu g/1x10^6$ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-mouse IgG (5-10 $\mu g/1x10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 $\mu g/1x10^6$) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of Hsp60/HSPD1 using anti-Hsp60/HSPD1 antibody. Hsp60/HSPD1 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 $\mu g/mL$ mouse anti-Hsp60/HSPD1 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG 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.



IHC analysis of HSPD1 using anti-HSPD1 antibody. HSPD1 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 1 μ g/ml mouse anti-HSPD1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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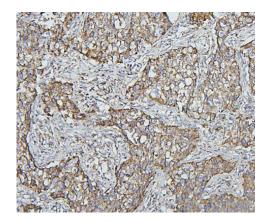
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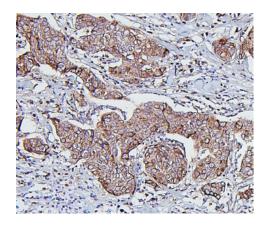
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IHC analysis of HSPD1 using anti-HSPD1 antibody. HSPD1 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml mouse anti-HSPD1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of HSPD1 using anti-HSPD1 antibody. HSPD1 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 1 μ g/ml mouse anti-HSPD1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of HSPD1 using anti-HSPD1 antibody. HSPD1 was detected in paraffin-embedded section of mouse liver 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 1 μ g/ml mouse anti-HSPD1 Antibody overnight at 4°C. Biotinylated goat anti-mouse lgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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IHC analysis of HSPD1 using anti-HSPD1 antibody. HSPD1 was detected in paraffin-embedded section of rat liver 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 1 μ g/ml mouse anti-HSPD1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Western blot analysis of HSPD1 using anti-HSPD1 antibody. 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 50 ug of sample under reducing conditions. Lane 1: human Caco-2 whole cell lysates Lane 2: human A549 whole cell lysates Lane 3: human THP-1 whole cell lysates Lane 4: human SW620 whole cell lysates Lane 5: human U-937 whole cell lysates Lane 6: human HepG2 whole cell lysates Lane 7: rat RH35 whole cell lysates Lane 8: mouse RAW246.7 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 mouse anti-HSPD1 antigen affinity purified monoclonal antibody at 0.5 μg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse 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 with Tanon 5200 system. A specific band was detected for HSPD1 at approximately 60KD. The expected band size for HSPD1 is at 60KD.

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