

Anti-GRP94/HSP90B1 Antibody

Catalog Number: PA1340

About HSP90B1

Heat shock protein 90kDa beta member 1 (HSP90B1), known also as endoplasmin, GRP94, is a chaperone protein that in humans is encoded by the HSP90B1 gene. It is mapped to chromosome 12q23.3. This gene encodes a member of a family of adenosine triphosphate (ATP)-metabolizing molecular chaperones with roles in stabilizing and folding other proteins. The encoded protein is localized to melanosomes and the endoplasmic reticulum. Expression of this protein is associated with a variety of pathogenic states, including tumor formation.

Overview

Product Name	Anti-GRP94/HSP90B1 Antibody
Reactive Species	Human, Rat
Description	Boster Bio Anti-GRP94/HSP90B1 Antibody catalog # PA1340. Tested in IHC, ICC, WB applications. This antibody reacts with Human, Rat.
Application	IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 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	P14625

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human GRP94, identical to the related mouse and rat sequences.
Predicted Reactive Species	Bovine
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, Human</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, By Heat</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Rat</p> <p>Immunocytochemistry , 0.5-1ug/ml, Human</p>

Anti-GRP94/HSP90B1 Antibody (PA1340) Images

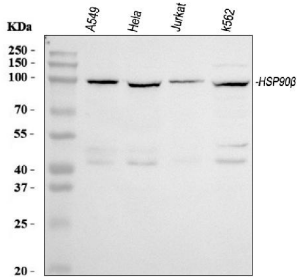


Figure 1. Western blot analysis of GRP94/HSP90B1 using anti-GRP94/HSP90B1 antibody (PA1340).

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 A549 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: human K562 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-

GRP94/HSP90B1 antigen affinity purified polyclonal antibody (Catalog # PA1340) 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 GRP94/HSP90B1 at

approximately 100 kDa. The expected band size for

GRP94/HSP90B1 is at 92 kDa.

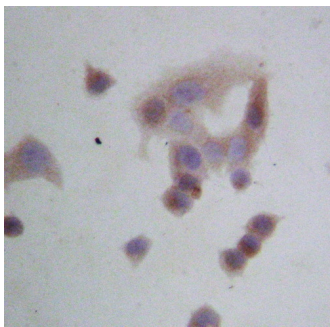


Figure 2. ICC analysis of GRP94/HSP90B1 using anti-GRP94/HSP90B1 antibody (PA1340).

GRP94/HSP90B1 was detected in an immunocytochemical

section of Hela 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 1 ug/ml rabbit anti-

GRP94/HSP90B1 Antibody (PA1340) overnight at 4°C.

Biotinylated goat anti-rabbit IgG was used as secondary

antibody and incubated for 30 minutes at 37°C. The section

was developed using HRP Conjugated Rabbit IgG Super

Vision Assay Kit (Catalog # SV0002) with DAB as the

chromogen.

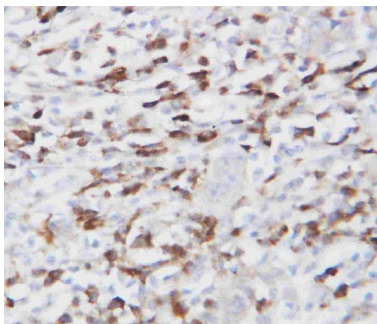


Figure 3. IHC analysis of GRP94/HSP90B1 using anti-GRP94/HSP90B1 antibody (PA1340).

GRP94/HSP90B1 was detected in a paraffin-embedded

section of Human Lung Cancer tissue. Heat mediated

antigen retrieval was performed in EDTA buffer (pH 8.0,

epitope retrieval solution). The tissue section was blocked

with 10% goat serum. The tissue section was then incubated

with 1 ug/ml rabbit anti-GRP94/HSP90B1 Antibody (PA1340)

overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit

IgG was used as secondary antibody and incubated for 30

minutes at 37°C. The tissue section was developed using

HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog

SV0002) with DAB as the chromogen.

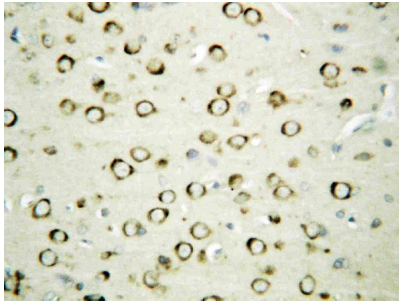


Figure 4. IHC analysis of GRP94/HSP90B1 using anti-GRP94/HSP90B1 antibody (PA1340). GRP94/HSP90B1 was detected in a paraffin-embedded section of Rat Brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-GRP94/HSP90B1 Antibody (PA1340) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 27738755, Ibutilide protects against cardiomyocytes injury via inhibiting endoplasmic reticulum and mitochondrial stress pathways

Visit bosterbio.com/anti-grp94-antibody-pa1340-boster.html to see all 1 publications.

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