

# **Anti-GRP94 Antibody**

**Catalog # ABO10665** 

## Specification

# **Anti-GRP94 Antibody - Product Information**

Application WB, IHC-P, IHC-F, ICC

Primary Accession P14625
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Endoplasmin(HSP90B1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human; Mouse; Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-GRP94 Antibody - Additional Information**

### **Gene ID 7184**

#### **Other Names**

Endoplasmin, 94 kDa glucose-regulated protein, GRP-94, Heat shock protein 90 kDa beta member 1, Tumor rejection antigen 1, gp96 homolog, HSP90B1, GRP94, TRA1

### **Calculated MW**

92469 MW KDa

### **Application Details**

Immunocytochemistry , 0.5-1  $\mu$ g/ml, Human, Mouse, Rat<br/>br>Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml, Rat, Human, Mouse<br/>br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Mouse, Rat, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>cbr>

### **Subcellular Localization**

Endoplasmic reticulum lumen. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

### **Protein Name**

Endoplasmin

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

### Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human GRP94(687-700aa INPRHPLIRDMLRR), identical to the related mouse and rat sequences.

#### **Purification**



Immunogen affinity purified.

**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-GRP94 Antibody - Protein Information**

Name HSP90B1 {ECO:0000303|PubMed:39509507, ECO:0000312|HGNC:HGNC:12028}

#### **Function**

ATP-dependent chaperone involved in the processing of proteins in the endoplasmic reticulum, regulating their transport (PubMed: <a href="http://www.uniprot.org/citations/23572575" target=" blank">23572575</a>, PubMed:<a href="http://www.uniprot.org/citations/39509507" target="blank">39509507</a>). Together with MESD, acts as a modulator of the Wnt pathway by promoting the folding of LRP6, a coreceptor of the canonical Wnt pathway (PubMed: <a href="http://www.uniprot.org/citations/23572575" target="\_blank">23572575</a>, PubMed:<a href="http://www.uniprot.org/citations/39509507" target="blank">39509507</a>). When associated with CNPY3, required for proper folding of Toll-like receptors (PubMed:<a href="http://www.uniprot.org/citations/11584270" target=" blank">11584270</a>). Promotes folding and trafficking of TLR4 to the cell surface (PubMed:<a href="http://www.uniprot.org/citations/11584270" target="\_blank">11584270</a>). May participate in the unfolding of cytosolic leaderless cargos (lacking the secretion signal sequence) such as the interleukin 1/IL-1 to facilitate their translocation into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) and secretion; the translocation process is mediated by the cargo receptor TMED10 (PubMed: <a href="http://www.uniprot.org/citations/32272059" target=" blank">32272059</a>).

### **Cellular Location**

Endoplasmic reticulum lumen. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P41148}. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

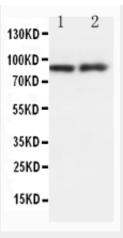
#### **Anti-GRP94 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

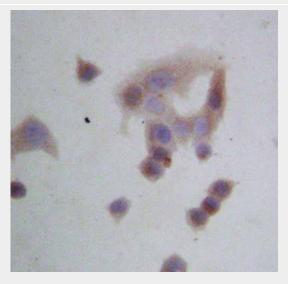
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-GRP94 Antibody - Images

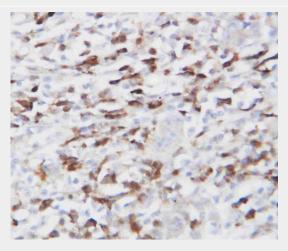




Anti-GRP94 antibody, ABO10665, Western blottingLane 1: RAJI Cell LysateLane 2: MCF-7 Cell Lysate

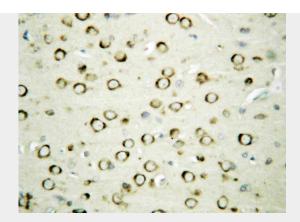


Anti-GRP94 antibody, ABO10665, IHC(P)IHC(P): HELA Cell



Anti-GRP94 antibody, ABO10665, IHC(P)IHC(P): Human Lung Cancer Tissue





Anti-GRP94 antibody, ABO10665, IHC(P)IHC(P): Rat Brain Tissue

# **Anti-GRP94 Antibody - Background**

Heat shock protein 90kDa beta member 1 (HSP90B1), known also as endoplasmin, GRP94, is a chaperone protein that in humans is encoded by the HSP90B1Â 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.