

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 μ g/ml, Human, Mouse, Rat
br>Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Rat, Human, Mouse
br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat
br>Western blot, 0.1-0.5 μ g/ml, Human
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 ReactivityNo 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: 23572575, PubMed:39509507). 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: 23572575, PubMed:39509507). When associated with CNPY3, required for proper folding of Toll-like receptors (PubMed:11584270). Promotes folding and trafficking of TLR4 to the cell surface (PubMed:11584270). 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: 32272059).

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.

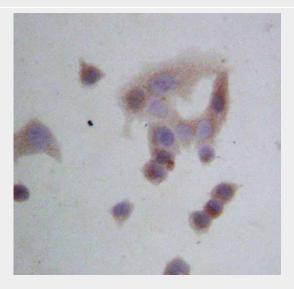
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GRP94 Antibody - Images

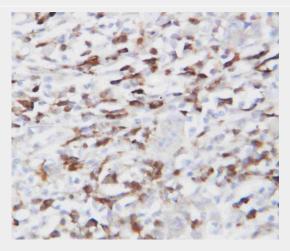




Anti-GRP94 antibody, ABO10665, Western blottingLane 1: RAJI Cell LysateLane 2: MCF-7 Cell Lysate

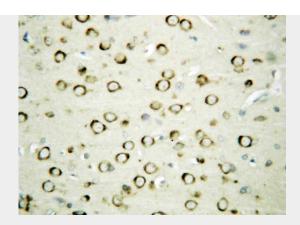


Anti-GRP94 antibody, ABO10665, IHC(P)IHC(P): HELA Cell



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.