

Anti-GRP94 Picoband Antibody

Catalog # ABO12323

Specification

Anti-GRP94 Picoband Antibody - Product Information

Application WB
Primary Accession P14625
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Endoplasmin(HSP90B1) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

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

Anti-GRP94 Picoband 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

Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

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 NaN3.

Immunogen

E.coli-derived human GRP94 recombinant protein (Position: R43-H221). Human GRP94 shares 99.4% and 98.9% amino acid (aa) sequence identity with mouse and rat GRP94, respectively.

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 Picoband 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 Picoband 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 Picoband Antibody - Images





Anti- GRP94 Picoband antibody, ABO12323, Western blottingAll lanes: Anti GRP94 (ABO12323) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: A375 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 92KDObserved bind size: 92KD

Anti-GRP94 Picoband Antibody - Background

Heat shock protein 90kDa beta member 1 (HSP90B1), known as endoplasmin, or 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.