

GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide Rat Monoclonal Antibody [Clone SPM249 ]

Catalog # AH12456

#### Specification

## **GRP94** / **HSP90B1** (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity

Host Clonality Isotype Calculated MW WB, IHC-P, IF, FC <u>P14625</u> <u>7184, 192374</u> Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Bovine, Sheep, Xenopus, Horse, Guinea Pig, Dog Rat Monoclonal Rat / IgG2a, kappa 94kDa KDa

### GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - 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

Application Note <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

### **GRP94** / **HSP90B1** (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - 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**

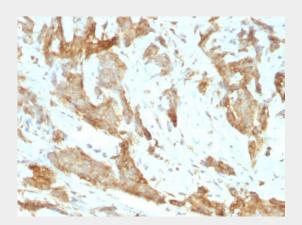
Endoplasmic reticulum lumen. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P41148}. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

# GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - Protocols

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

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

GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with GRP94 Monoclonal Antibody (SPM249).

GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - Background



Recognizes a protein of 94kDa, which is identified as the glucose-regulated protein 94 (grp94) and also tumor rejection antigen (gp96). Grp94 shows a high degree of sequence homology with the heat shock protein 90 (hsp90). This MAb is highly specific to grp94 and shows minimal cross-reaction with other members of the HSP90 family. Grp s are a class of proteins unresponsive to heat shock and are induced by glucose deprivation. Grp94 has been briefly studied as a prognostic factor in breast cancer.

# **GRP94** / **HSP90B1** (Endoplasmic Reticulum Marker) Antibody - With BSA and Azide - References

Sorger, P.K. et al. J. Mol. Biol. 194: 341-344 (1987). | Tandon, A.K. et.al. Breast Cancer Res. and Treat. 16: 146 (1990). |