

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

Rat Monoclonal Antibody [Clone 9G10.F8.2] Catalog # AH12453

Product Information

Application WB, IF, FC, IHC-P

 Primary Accession
 P14625

 Other Accession
 7184, 192374

Reactivity Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Bovine, Sheep,

Xenopus, Horse, Guinea Pig, Dog

Host Rat

Clonality Monoclonal

Isotype Rat / IgG2a, kappa

Clone Names 9G10.F8.2 Calculated MW 92469

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 WB~~1:1000 IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A

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.

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:<u>23572575</u>, PubMed:<u>39509507</u>). 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:<u>23572575</u>, PubMed:<u>39509507</u>). When associated with CNPY3, required for proper folding of Toll-like receptors (PubMed:<u>11584270</u>).

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.

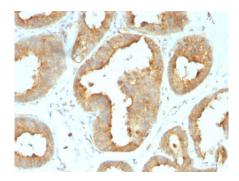
Background

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.

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). |

Images



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with GRP94 Monoclonal Antibody (9G10.F8.2).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.