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

Rat Monoclonal Antibody [Clone SPM249]
Catalog # AH12456

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	SPM249
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: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.

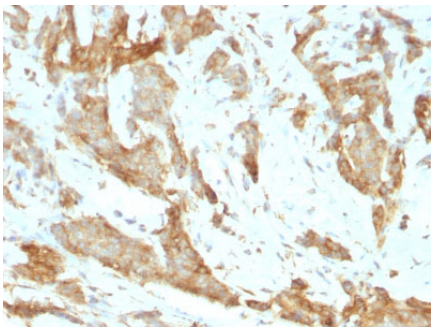
Background

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 (SPM249).

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