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Rabbit Anti-GRP94/AP Conjugated antibody

SL0194R-AP

Product Name	Anti-GRP94/AP
Chinese Name	碱性磷酸酶（AP）标记的葡萄糖调节蛋白 94 抗体
Alias	HSP gp96; heat shock protein gp96 precursor; 94 kDa glucose regulated protein; ECGP; Endoplasmin; Endothelial cell (HBMEC) glycoprotein; Glucose regulated protein 94; Glucose regulated protein 94kDa; gp96; gp96 homolog; GRP 94; Heat shock protein 90 kDa beta member 1; HSP90B1; Stress inducible tumor rejection antigen GP96; TRA1; Tumor rejection antigen 1; Tumor rejection antigen gp96; ENPL_HUMAN; Endoplasmin.
Research Area	Cell biology immunology Neurobiology Signal transduction Apoptosis
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat(predicted:Chicken,Dog,Pig,Cow,Horse,Rabbit)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	86kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human GRP94
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Glucose regulated protein 94 (GRP 94) is a resident protein of the endoplasmic reticulum (ER) and is induced by the accumulation of unfolded proteins suggesting that it might associate transiently with a variety of newly

synthesized secretory and membrane proteins or permanently with mutant or defective proteins. The highly conserved sequence Lys-Asp-Glu-Leu (KDEL) is present at the C terminus of GRP 94 and other resident ER proteins including GRP 78 and protein disulfide isomerase (PDI). The presence of carboxy terminal KDEL appears to be necessary for retention and appears to be sufficient to reduce the secretion of proteins from the ER. This retention is reported to be mediated by a KDEL receptor. GRP 94 is also a low affinity, high capacity calcium binding protein, though it's role, if any, in calcium regulation is not understood.

Function:
Molecular chaperone that functions in the processing and transport of secreted proteins. When associated with CNPY3, required for proper folding of Toll-like receptors. Functions in endoplasmic reticulum associated degradation (ERAD). Has ATPase activity.

Subunit:
Homodimer; disulfide-linked. Component of an EIF2 complex at least composed of CELF1/CUGBP1, CALR, CALR3, EIF2S1, EIF2S2, HSP90B1 and HSPA5 (By similarity). Part a large chaperone multiprotein complex comprising DNAJB11, HSP90B1, HSPA5, HYOU, PDIA2, PDIA4, PDIA6, PPIB, SDF2L1, UGT1A1 and very small amounts of ERP29, but not, or at very low levels, CALR nor CANX. Interacts with AIMP1; regulates its retention in the endoplasmic reticulum. Interacts with OS9. Interacts with CNPY3. This interaction is disrupted in the presence of ATP (By similarity). Interacts with TLR4 and TLR9, but not with TLR3.

Subcellular Location:
Endoplasmic reticulum lumen. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Similarity:
Belongs to the heat shock protein 90 family.

Database links:

Entrez Gene: 7184 Human

Entrez Gene: 22027 Mouse

Omim: 191175 Human

SwissProt: P14625 Human

SwissProt: P08113 Mouse

Unigene: 192374 Human

Unigene: 87773 Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

GRP94(G protein-coupled receptor94)蛋白又称 GP96 属于热休克蛋白 90 家组成员。由二硫键连接的同源二具体表达在内质网腔。内质网分子伴侣 Grp94 在正常细胞的内质网腔中含量较高，Grp94 在内质网生成、并存留在内质网中，其表达与多种因素有关，各种应激条件下可见其表达明显增高。细胞周期也是常见的影响细胞增殖的因素之一，因此细胞增殖过程中 Grp94 的表达情况具有重要意义。Grp94 与细胞周期有关。