

**GRP94 Antibody**  
**GRP94 Antibody, Clone 6B12**  
**Catalog # ASM10666****Specification****GRP94 Antibody - Product Information**

Primary Accession	<a href="#">P14625</a>
Other Accession	<a href="#">NP_003290.1</a>
Host	Mouse
Clonality	Monoclonal
<b>Target/Specificity</b>	
GRP94	

**Other Names**

HSP90B1 Antibody, GP96 Antibody, TRA1 Antibody, ECGP Antibody, 94 kDa glucose regulated protein antibody, 94 kDa glucose-regulated protein antibody, ECGP antibody, Endoplasmic antibody, Endothelial cell (HBMEC) glycoprotein antibody, ENPL\_HUMAN antibody, Glucose regulated protein 94kDa antibody, gp96 antibody, gp96 homolog antibody, GRP 94 antibody, GRP-94 antibody, Heat shock protein 90 kDa beta member 1 antibody, heat shock protein 90kDa beta (Grp94), member 1 antibody, Heat shock protein, 90 kDa, beta, 1 antibody, HSP90B1 antibody, Stress inducible tumor rejection antigen GP96 antibody, TRA1 antibody, tumor rejection antigen (gp96) 1 antibody, Tumor rejection antigen 1 antibody, Tumor rejection antigen gp96 antibody, Tumor rejection antigen-1 (gp96) antibody

**Immunogen**

KDEL peptide (C-AVKDEL -COOH) conjugated at the N-terminal to Bovine Serum Albumin (BSA)

**Purification**

Protein G Purified

**Storage**

-20°C

**Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.09% Sodium azide \*Storage buffer may change when conjugated

**Shipping Temperature**

Blue Ice or 4°C

**Certificate of Analysis**

A 1:1000 dilution of SMC-541 was sufficient for detection of GRP94 in 10 µg of HeLa cell lysates by ECL immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Endoplasmic reticulum lumen | Melanosome

**GRP94 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## GRP94 Antibody - Images

## GRP94 Antibody - Background

Grp94 (glucose regulated protein 94, gp96) is a constitutively expressed endoplasmic reticulum (ER) luminal protein that is up-regulated in response to cellular stress such as heat shock, oxidative stress or glucose depletion. Grp94 is thought to play a role in protein translocation to the ER, in their subsequent folding and assembly, and in regulating protein secretion (1). Grp94 also plays a role in antigen presentation by accessing the endogenous pathway and eliciting specific CTL responses to chaperone bound peptides via MHC class I pathway (2). Grp94 is a member of the HSP90 family of stress proteins and shares sequence homology with its cytosolic equivalent, HSP90 (3). Both HSP90 and Grp94 are calcium binding proteins (4). Despite sharing 50% sequence homology over its N domains and complete conservation in its ligand binding domains with HSP90, Grp94 and HSP90 differ in their interactions with regulatory ligands as Grp94 has weak ATP binding and hydrolysis activity (5).

Grp94 exists as a homodimer and the two subunits interact at two distinct intermolecular sites, C terminal dimerization domains and the N-terminal interacts with the middle domain of opposing subunits (6). Grp94 contains a carboxy terminal KDEL (Lys-Asp-Glu-Leu) sequence which is believed to aid in its retention in the ER (7).

## GRP94 Antibody - References

1. Rudolph R.W., and Bedows E. (1997) J Biol Chem 272: 3125-3128.
2. Srivastava P.K., et al. (1994) Immunogenetics. 39(2):93-98.
3. Mazzarella R.A., and Green M. (1987) J Biol Chem 262: 8875-8883.
4. Kang, H.S. and Welch W.J. (1991) J Biol Chem 266(9): 5643-5649.
5. Soldano K.L., et al. (2003) J Biol Chem 278(48): 48330-48338.
6. Chu F., et al. (2006) Protein Sci 15(6): 1260-1269.
7. Peter F., et al., (1992) J Biol Chem 267: 10631-10637.
8. Allen S. et al. (2000) Blood 96(2): 560-568.
9. Sato K et al. (2001) Blood 98(6): 1852-1857.
10. Yun S.-W. et al (2000) Brain Research Bulletin.52(5): 371-378.
11. Choukhi A., et al. (1998) J. Virol. 72: 3851-3858.
12. Hoshino T., et al. (1998) Blood 91(11): 4379-4386.
13. Riera M. et al. (1999) Mol. Cell Biochem. 191: 97-104.
14. Gusarova V., et al. (2001) J. Biol. Chem. 276(27): 24891-24900.