For Research Use Only

GRP94 Monoclonal antibody

Catalog Number:60012-2-lg 7 Publications



Basic Information

Catalog Number: GenBank Accession Number: 60012-2-lg BC009195

Concentration: GeneID (NCBI): 7184

Source: UNIPROT ID: Mouse P14625
Isotype: Full Name:

lgG1 heat shock protein 90kDa beta
Immunogen Catalog Number (Grp94), member 1

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AG1439 Calculated MW: 96 kDa

Observed MW: 95 kDa Purification Method:

Protein G purification CloneNo.:

4G7C7 Recommended Dilutions: WB 1:2000-1:10000 IHC 1:200-1:800

IF/ICC 1:400-1:1600

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB

Species Specificity:

human
Cited Species:
human, mouse

ons: Positive Controls:

WB: HeLa cells, HEK-293 cells, HepG2 cells, Jurkat

cells

IHC: human colon cancer tissue, human pancreas

ancer tissue

IF/ICC: HepG2 cells, A431 cells

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Glucose-regulated protein 94 (GRP94), also called HSP90B1 and GP96, is an endoplasmic reticulum (ER)-resident member of the heat shock protein 90 (HSP90) family (PMID: 33802964; 24658275). Under ER stress conditions, GRP94 accelerates its function as a molecular chaperone. Client proteins of GRP94 include toll-like receptors (TLRs), glycoprotein (GP) IX subunit, insulin-like growth factors (IGFs), proinsulin, and integrins (PMID: 7913987; 32781621; 22079671). As well as being an ER chaperone, GRP94 can also participate in Calcium regulation and is also a regulator of innate and adaptive immunity (PMID: 33802964; 11584270).

Notable Publications

Author	Pubmed ID	Journal	Application
Chenxue Gong	31743135	Anticancer Drugs	WB
Li-Feng-Rong Qi	39178680	Phytomedicine	WB
Yuzhen Chang	38362150	Front Pharmacol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

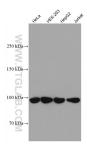
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

W: ptgcn.cor

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

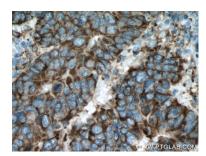
Selected Validation Data



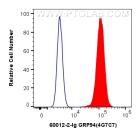
Various lysates were subjected to SDS PAGE followed by western blot with 60012-2-1g (GRP94 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



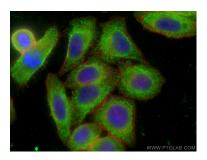
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60012-2-Ig (GRP94 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60012-2-lg (GRP94 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP94 (60012-2-1g, Clone:4G7C7) and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(I+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-1g, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using GRP94 antibody (60012-2-1g, Clone: 4G7C7) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red)