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 GeneID (NCBI): 150ul, Concentration: 1000 ug/ml by 7184

Nanodrop: **UNIPROT ID:** P14625 Mouse Full Name:

Isotype: heat shock protein 90kDa beta

(Grp94), member 1 lgG1 Immunogen Catalog Number: Calculated MW: AG1439 96 kDa Observed MW:

95 kDa

4G7C7 Recommended Dilutions: WB 1:2000-1:10000

IHC 1:200-1:800

IF/ICC 1:400-1:1600

Purification Method:

CloneNo.:

Protein G purification

Applications

Tested Applications:

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

Cited Applications:

Species Specificity: human

Cited Species: human, mouse

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

buffer pH 6.0

Positive Controls:

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

IHC: human colon cancer tissue, human pancreas

cancer tissue

IF/ICC: HepG2 cells, A431 cells

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.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

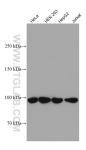
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

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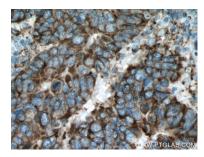
Selected Validation Data



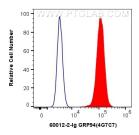
Various lysates were subjected to SDS PAGE followed by western blot with 60012-2-1g (GRP94 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



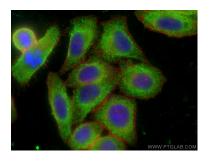
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60012-2-Ig (GRP94 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60012-2-Ig (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 Affini Pure Goat Anti-Mouse IgG(H+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-Ig, Clone: 4G7C7) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).