For Research Use Only

## GRP94 Monoclonal antibody, PBS Only (Capture)



**Purification Method:** 

CloneNo.:

4G7C7

Protein G purification

Catalog Number: 60012-2-PBS

**Basic Information** 

Catalog Number: GenBank Accession Number:

60012-2-PBS BC009195

Size: GeneID (NCBI): 100ug , Concentration: 1mg/ml by 7184

Nanodrop; UNIPROT ID:
Source: P14625
Mouse Full Name:

Isotype: heat shock protein 90kDa beta

IgG1 (Grp94), member 1
Immunogen Catalog Number: Calculated MW:
AG1439 96 kDa

Observed MW: 95 kDa

**Applications** 

**Tested Applications:** 

Sandwich ELISA, Indirect ELISA, IF/ICC, IHC, WB

Species Specificity:

human

**Product Information** 

60012-2-PBS targets GRP94 as part of a matched antibody pair:

MP50013-1: 60012-2-PBS capture and 60012-1-PBS detection (validated in Sandwich ELISA)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

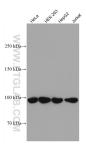
**Background Information** 

HSP90 proteins are highly conserved molecular chaperones, which normally associate with other cochaperones and play important roles in folding newly synthesized proteins or stabilizing and refolding denatured proteins after stress. HSP90B1 (GP96 or GRP94) is an endoplasmic reticulum paralogue of the cytosolic HSP90. As a major ER chaperone to mediate the UPR and a master chaperone for Toll-like receptors (TLRs), HSP90b1 chaperones peptides to MHC class I molecules of dendritic cells and other antigen-presenting cells, as well as facilitating the assembly of immunoglobulin. The protein is also involved in many other bio-processes. This antibody was generated against the N-terminal region of full-length HSP90b1.

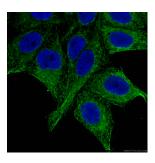
Storage

Storage: Store at -80°C. Storage Buffer: 100% PBS pH 7.3

## Selected Validation Data



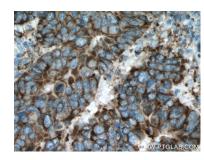
Various lysates were subjected to SDS PAGE followed by western blot with 60012-2-lg (GRP94 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



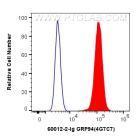
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 60012-2-lg (GRP94 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



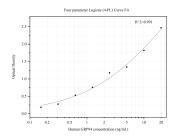
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60012-2-lg (GRP94 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP94 (60012-2-lg, Clone:4G7C7) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-lg, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 60012-2-PBS in a



Sandwich ELISA standard curve of MP50013-1, GRP94 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 60012-2-PBS. Detection antibody: HRP-conjugated 60012-1-PBS. Standard: Ag1439. Range: 0.156-20 ng/mL.