

For Research Use Only

GRP94 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 60012-2-PBS



Basic Information

Catalog Number: 60012-2-PBS	GenBank Accession Number: BC009195	Purification Method: Protein G purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 7184	CloneNo.: 4G7C7
Source: Mouse	UNIPROT ID: P14625	
Isotype: IgG1	Full Name: heat shock protein 90kDa beta (Grp94), member 1	
Immunogen Catalog Number: AG1439	Calculated MW: 96 kDa	
	Observed MW: 95 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Sandwich ELISA, Indirect ELISA

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

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).

Storage

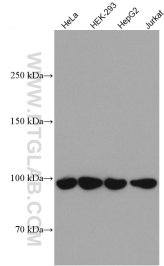
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

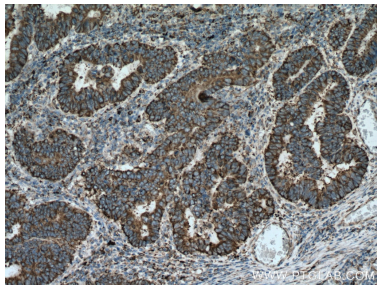
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

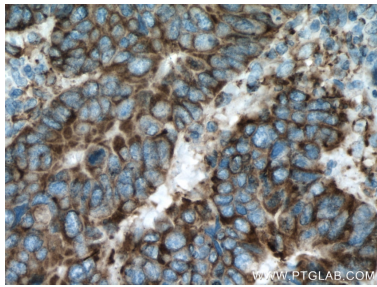
Selected Validation Data



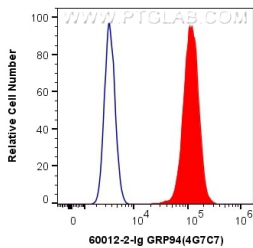
Various lysates were subjected to SDS PAGE followed by western blot with 60012-2-Ig (GRP94 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



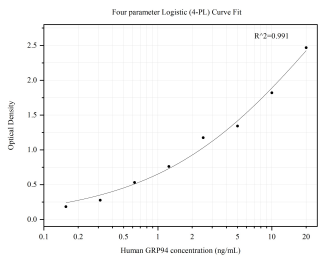
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 60012-2-Ig (GRP94 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60012-2-PBS in a different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



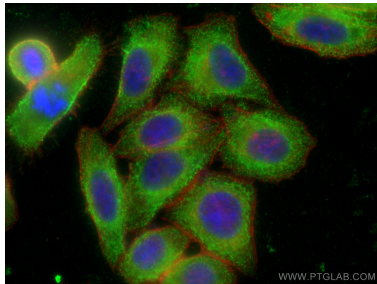
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 60012-2-Ig (GRP94 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60012-2-PBS in a different storage buffer formulation.



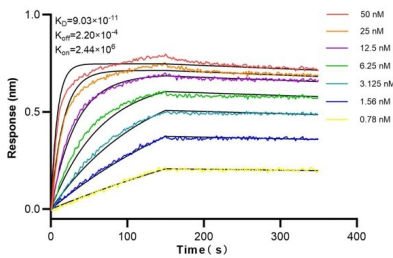
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP94 (60012-2-Ig, Clone:4G7C7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 60012-2-



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.



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



Biolayer interferometry (BLI) kinetic assays of 60012-2-Ig against Human GRP94 were performed. The affinity constant is 90.3 pM.