For Research Use Only

HSP47/SERPINH1 Recombinant antibody, PBS Only (Detector)

Catalog Number:83689-3-PBS

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Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
83689-3-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_001235.5

GeneID (NCBI):
871

UNIPROT ID:
P50454

Full Name:
serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)

Calculated MW:
46kDa

Observed MW:
46 kDa

Purification Method:
Protein A purfication

CloneNo.:
240752F6

Applications

Tested Applications:
WB, IHC, FC (Intra), Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse

Product Information

83689-3-PBS targets HSP47/SERPINH1 as part of a matched antibody pair:

MP00677-2: 83689-4-PBS capture and 83689-3-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

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

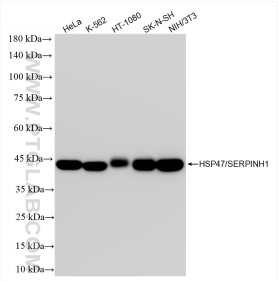
HSP47 is also named as Serpin H1, colligen, CBP1, CBP2, HSP47, SERPINH2 and belongs to the serpin family. This gene encodes a member of the serpin superfamily of serine proteinase inhibitors. The encoded protein is localized to the endoplasmic reticulum. It binds specifically to collagen and can be involved as a chaperone in the biosynthetic pathway of collagen. Autoantibodies to the encoded protein have been found in patients with rheumatoid arthritis. HSP47 has a calculated molecular weight of 46 kDa.

Storage

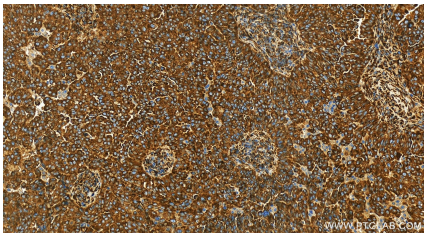
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

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

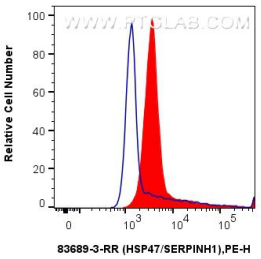
Selected Validation Data



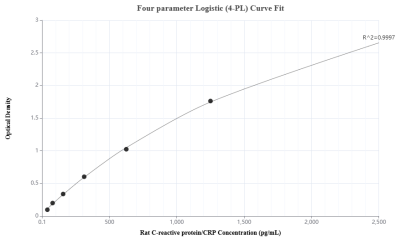
Various lysates were subjected to SDS PAGE followed by western blot with 83689-3-RR (HSP47/SERPINH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83689-3-PBS in a different storage buffer formulation.



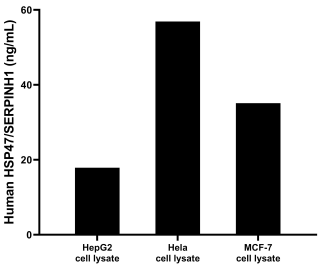
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83689-3-RR (HSP47/SERPINH1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83689-3-PBS in a different storage buffer formulation.



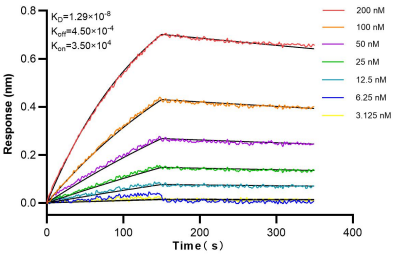
1x10^6 HepG2 cells were intracellularly stained with 0.25 ug HSP47/SERPINH1 Recombinant antibody (83689-3-RR, Clone:240752F6) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83689-3-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP00677-2, Human HSP47/SERPINH1 Recombinant Matched Antibody Pair - PBS only. 83689-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1201. 83689-3-PBS was HRP conjugated as the detection antibody. Range: 0.23-15 ng/mL



HepG2, Hela and MCF-7 cells were cultured in DMEM supplemented with 10% fetal bonive serum, 100 U/mL penicillin, and 100 µg/mL streptomycin sulfate. Aliquots of the cell culture supernates were removed. Cells were lysed and assayed for human HSP47/SERPINH1. Human HSP47/SERPINH1 in HepG2 cell lysate measured 17.9 ng/mL. Human HSP47/SERPINH1 in Hela cell lysate measured 56.9 ng/mL. Human HSP47/SERPINH1 in MCF-7 cell lysate



Biolayer interferometry (BLI) kinetic assays of 83689-3-RR against Human HSP47/SERPINH1 were performed. The affinity constant is 12.9 nM.