

For Research Use Only

# HSP47/SERPINH1 Recombinant antibody, PBS Only (Detector)

Catalog Number:83689-3-PBS



## Basic Information

<b>Catalog Number:</b> 83689-3-PBS	<b>GenBank Accession Number:</b> NM_001235.5	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 871	<b>CloneNo.:</b> 240752F6
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P50454	
<b>Isotype:</b> IgG	<b>Full Name:</b> serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)	
	<b>Calculated MW:</b> 46kDa	
	<b>Observed MW:</b> 46 kDa	

## Applications

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

**Species Specificity:**  
human, mouse

## 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.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

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

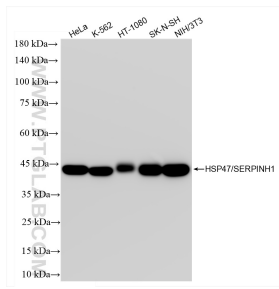
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

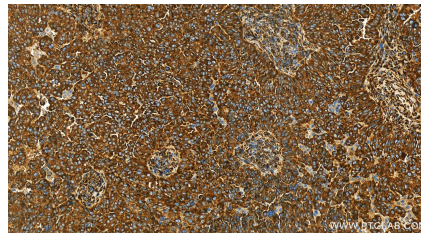
W: [ptgcn.com](http://ptgcn.com)

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

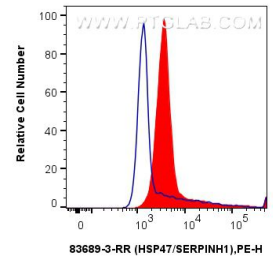
## Selected Validation Data



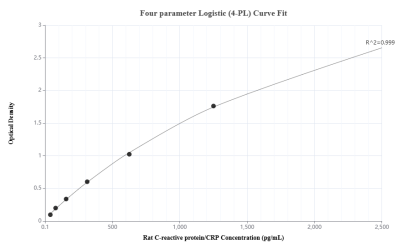
Various lysates were subjected to SDS PAGE followed by western blot with 83689-3-RR (HSP47/SERPINH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83689-3-PBS in a different storage buffer formulation.



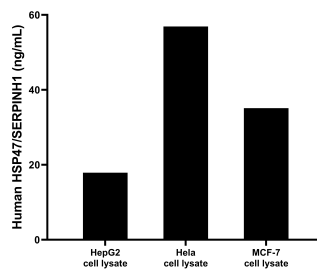
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83689-3-RR (HSP47/SERPINH1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83689-3-PBS in a different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



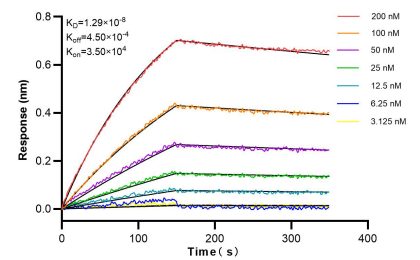
$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25  $\mu$ g HSP47/SERPINH1 Recombinant antibody (83689-3-RR, Clone:240752F6) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow 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 bovine serum, 100 U/mL penicillin, and 100  $\mu$ g/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



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