

For Research Use Only

# ASGR1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83691-3-PBS



## Basic Information

<b>Catalog Number:</b> 83691-3-PBS	<b>GenBank Accession Number:</b> NM_001671.4	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 432	<b>CloneNo.:</b> 240672C4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P07306-1	
<b>Isotype:</b> IgG	<b>Full Name:</b> asialoglycoprotein receptor 1	
	<b>Calculated MW:</b> 33 kDa	
	<b>Observed MW:</b> 42-46 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF-P, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

83691-3-PBS targets ASGR1 as part of a matched antibody pair:

MP00681-1: 83691-2-PBS capture and 83691-3-PBS detection (validated in Cytometric bead array)

MP00681-3: 83691-1-PBS capture and 83691-3-PBS detection (validated in Cytometric bead array, 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

Asialoglycoprotein receptor (ASGPR), also known as the hepatic galactose/N-acetylglucosamine (GlcNAc) receptor or Ashwell receptor, is a C-type lectin expressed exclusively in hepatic parenchymal cells. ASGPR consists of two subunits, a major subunit (ASGR1, HL-1) and a minor subunit (ASGR2, HL-2), and specifically recognizes terminal  $\beta$ -linked galactose or GlcNAc on circulating glycoproteins or cells. This receptor plays a critical role in serum glycoprotein homeostasis by mediating the endocytosis and lysosomal degradation of glycoproteins that contain terminal galactose or GlcNAc residues. ASGPR may facilitate hepatic infection by multiple viruses including hepatitis B, and is also a target for liver-specific drug delivery.

## Storage

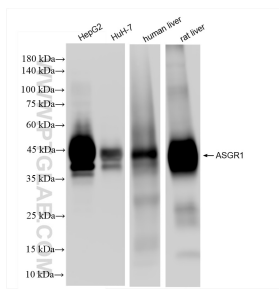
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

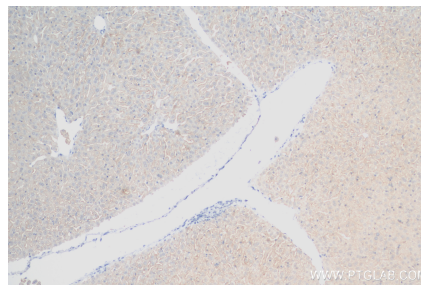
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

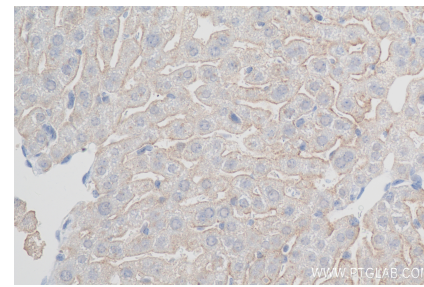
## Selected Validation Data



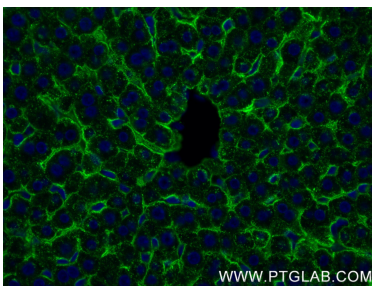
Various lysates were subjected to SDS PAGE followed by western blot with 83691-3-RR (ASGR1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83691-3-PBS in a different storage buffer formulation.



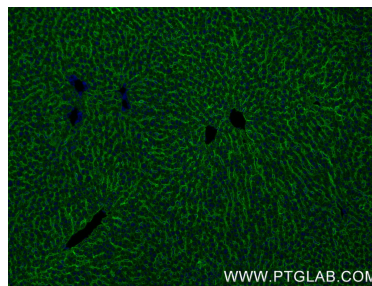
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 83691-3-RR (ASGR1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83691-3-PBS in a different storage buffer formulation.



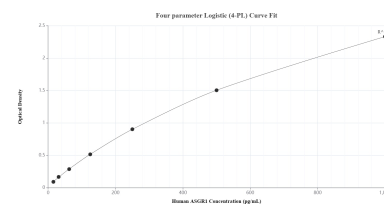
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 83691-3-RR (ASGR1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83691-3-PBS in a different storage buffer formulation.



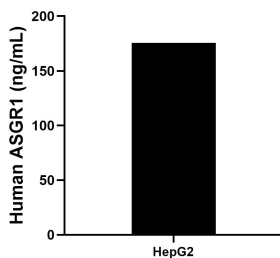
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat liver tissue using ASGR1 antibody (83691-3-RR, Clone: 240672C4) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83691-3-PBS in a different storage buffer formulation.



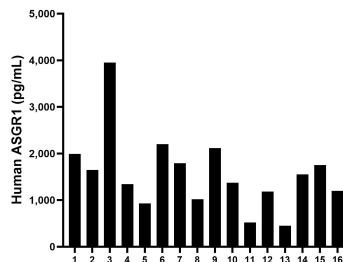
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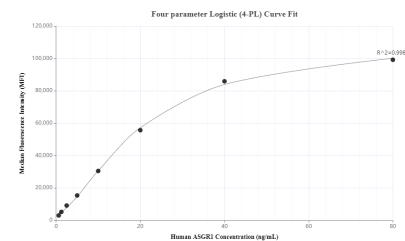
Sandwich ELISA standard curve of MP00681-3, Human ASGR1 Recombinant Matched Antibody Pair - PBS only. 83691-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0946. 83691-3-PBS was HRP conjugated as the detection antibody. Range: 7.8-1000 pg/mL.



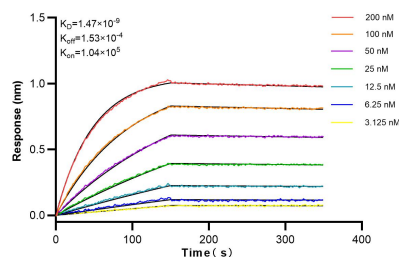
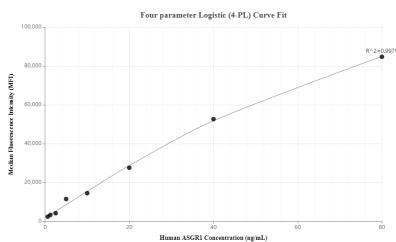
The mean human ASGR1 concentration was determined to be 175.6 ng/mL in HepG2 cell extract based on a 3.7 mg/mL extract load.



Serum of sixteen individual healthy human donors was measured. The ASGR1 concentration of detected samples was determined to be 1,563.4 pg/mL with a range of 450.5-3,950.7 pg/mL.



Cytometric bead array standard curve of MP00681-1, ASGR1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83691-2-PBS. Detection antibody: 83691-3-PBS. Standard: Eg0946. Range: 0.625-80 ng/mL.



Cytometric bead array standard curve of MP00681-3, ASGR1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83691-1-PBS. Detection antibody: 83691-3-PBS. Standard: Eg0946. Range: 0.625-80 ng/mL.

Biolayer interferometry (BLI) kinetic assays of 83691-3-RR against Human ASGR1 were performed. The affinity constant is 1.47 nM.