

For Research Use Only

# SPARC Recombinant antibody, PBS Only (Detector)

Catalog Number: 84621-3-PBS



## Basic Information

<b>Catalog Number:</b> 84621-3-PBS	<b>GenBank Accession Number:</b> NM_003118.4	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6678	<b>CloneNo.:</b> 241952E11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P09486	
<b>Isotype:</b> IgG	<b>Full Name:</b> secreted protein, acidic, cysteine-rich (osteonectin)	
	<b>Calculated MW:</b> 35kDa	
	<b>Observed MW:</b> 40-43 kDa	

## Applications

**Tested Applications:**  
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Product Information

84621-3-PBS targets SPARC as part of a matched antibody pair.

MP01430-2: 84621-1-PBS capture and 84621-3-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

SPARC, also known as ON (Osteonectin) or BM-40 (Basement-membrane protein 40), is an extracellular glycoprotein with the calculated molecular mass of 35 kDa and the apparent molecular mass of 40-43 kDa and 50 kDa (PMID: 7495300, 12365801). SPARC belongs to a group of matricellular proteins defined as secreted components that do not contribute directly to the formation of structural elements but serve to modulate cell-matrix interactions and cellular functions (PMID: 7542656; 12231357). SPARC is expressed at high levels in bone tissue, is distributed widely in many other tissues and cell types, and is associated generally with tissues undergoing morphogenesis, remodeling and wound repair (PMID: 10567433). It elicits changes in cell shape, inhibits cell-cycle progression, and influences the synthesis of extracellular matrix (PMID: 12721366). Altered expression of SPARC has been reported in a variety of cancers, which include breast, ovarian, colorectal, and pancreatic cancer as well as melanoma and glioblastomas (PMID: 18849185).

## Storage

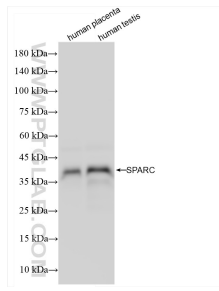
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

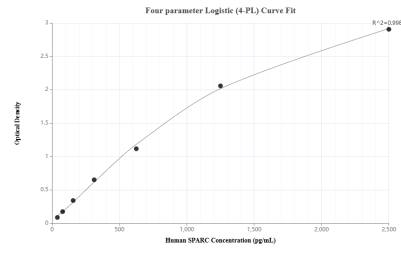
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

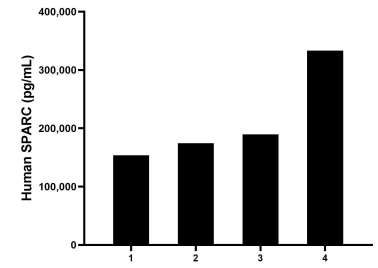
## Selected Validation Data



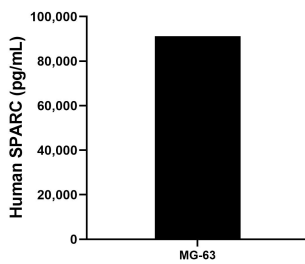
Various lysates were subjected to SDS PAGE followed by western blot with 84621-3-RR (SPARC antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.



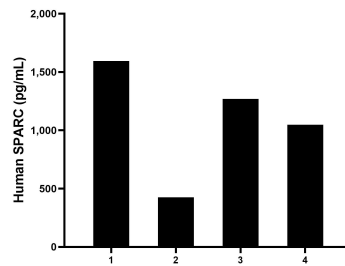
Sandwich ELISA standard curve of MP01430-2, Human SPARC Recombinant Matched Antibody Pair - PBS only. 84621-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1169. 84621-3-PBS was HRP conjugated as the detection antibody. Range: 39.1-1250 pg/mL



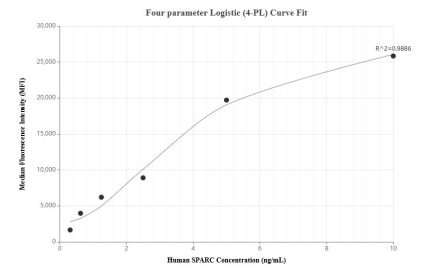
Serum of four healthy human donors was measured. The human SPARC concentration of detected samples was determined to be 212,811.0 pg/mL with a range of 153,761.1 - 333,381.8 pg/mL



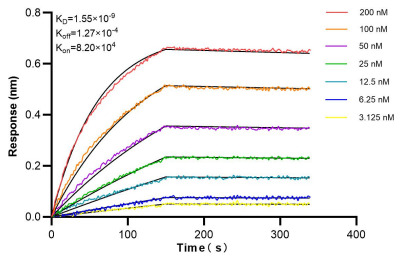
MG-63 cells were cultured in DMEM supplemented with 10% fetal bovine serum. An aliquot of the cell culture supernate was removed, assayed for human SPARC, and measured 91,240.8 pg/mL



Human milk of four healthy human donors was measured. The human SPARC concentration of detected samples was determined to be 1,084.0 pg/mL with a range of 425.0 - 1,594.2 pg/mL



Cytometric bead array standard curve of MP01430-2, SPARC Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84621-1-PBS. Detection antibody: 84621-3-PBS. Standard: Eg1169. Range: 0.313-10 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84621-3-RR against Human SPARC were performed. The affinity constant is 1.55 nM.