For Research Use Only

SPARC Recombinant monoclonal antibody, PBS Only (Detector)



Purification Method:

Protein A purification

CloneNo.:

241952E11

Catalog Number:84621-3-PBS

Featured Product

Basic Information

Catalog Number: 84621-3-PBS Source:

Rabbit Isotype: IgG

Immunogen Catalog Number:

EG1169

GenBank Accession Number:

NM_003118.4 GeneID (NCBI): 6678 **UNIPROT ID:**

P09486 Full Name:

secreted protein, acidic, cysteine-rich (osteonectin)

Calculated MW: 35kDa Observed MW: 40-43 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, Cytometric bead array, Sandwich

ELISA, Indirect ELISA Species Specificity:

human

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

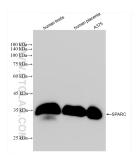
Storage:

Store at -80°C.

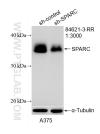
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS only, pH7.3

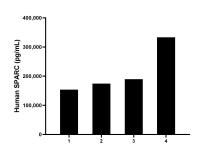
Selected Validation Data



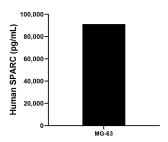
Various lysates were subjected to SDS PAGE followed by western blot with 84621-3-RR (SPARC antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.



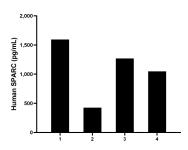
WB result of SPARC antibody (84621-3-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SPARC transfected A375 cells. This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.



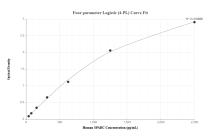
Serum of four healthy human donors was measured. The human SPARC concentration of detected samples was determined to be 212,811.0 pg/mL with a range of 153,761.1 - 333,381.8 pg/mL



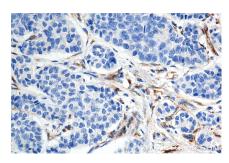
MG-63 cells were cultured in DMEM supplemented with 10% fetal bonive serum. An aliquot of the cell culture supernate was removed, assayed for human SPARC, and measured 91,240.8 pg/mL



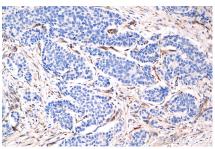
Human milk of four healthy human donors was measured. The human SPARC concentration of detected samples was determined to be 1,084.0 pg/mL with a range of 425.0 - 1,594.2 pg/mL



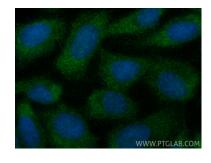
Sandwich ELISA standard curve of MP01430-2, Human SPARC Recombinant Matched Antibody Pair - PBS only. 84621-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1169. 84621-3-PBS was HRP conjugated as the detection antibody. Range: 39.1-1250 pg/mL



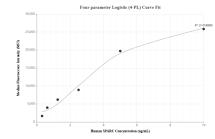
Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 84621-3-RR (SPARC antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.

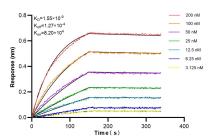


Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 84621-3-RR (SPARC antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using SPARC antibody (84621-3-RR, Clone: 241952E11) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84621-3-PBS in a different storage buffer formulation.





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 (BLL) kinetic assays of 84621-3-PBS against Human SPARC were performed. The affinity constant is 8.73 nM.

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