

# S100A4 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 84221-1-PBS

## Basic Information

<b>Catalog Number:</b> 84221-1-PBS	<b>GenBank Accession Number:</b> BC016300	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 6275	<b>CloneNo.:</b> 241448A12
<b>Isotype:</b> IgG	<b>ENSEMBL Gene ID:</b> ENSG00000196154	
<b>Immunogen Catalog Number:</b> AG9019	<b>UNIPROT ID:</b> P26447	
	<b>Full Name:</b> S100 calcium binding protein A4	
	<b>Calculated MW:</b> 101 aa, 12 kDa	
	<b>Observed MW:</b> 10-12 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse

## Background Information

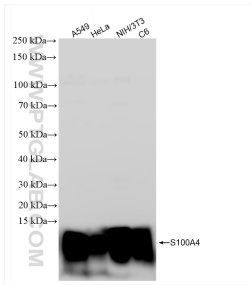
S100A4 is a member of the S100 family of calcium-binding proteins. The S100 family members have been involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100A4 is known to localize to and function in the nucleus, cytoplasm of cells, and the extracellular space. S100A4 has also been shown to be associated with tumor growth, motility, invasion, metastasis, angiogenesis, apoptosis, and chemoresistance. It is a fibroblast-specific protein associated with mesenchymal cell morphology and motility, is expressed during epithelial-mesenchymal transformations (EMT) in vivo (PMID: 9362334). It is a specific prognostic marker for renal survival in patients with IgAN (PMID: 16105038). It is also an improved marker for lung fibroblasts that could be useful for investigating the pathogenesis of pulmonary fibrosis (PMID: 15618458). Overexpression of S100A4 is correlated with a worse prognosis in patients with various types of cancer.

## Storage

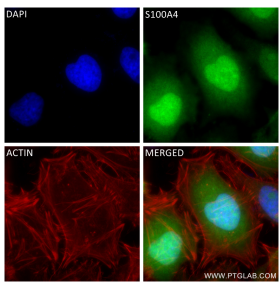
**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

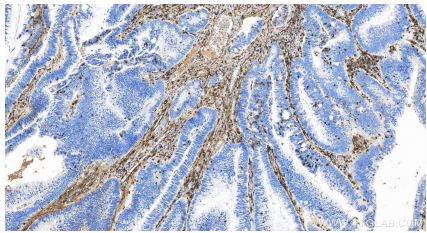
Selected Validation Data



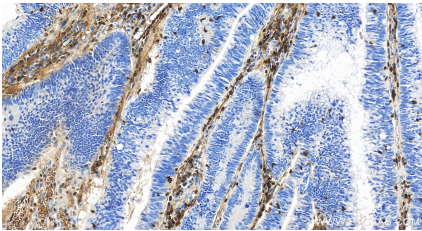
Various lysates were subjected to SDS PAGE followed by western blot with 84221-1-RR (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



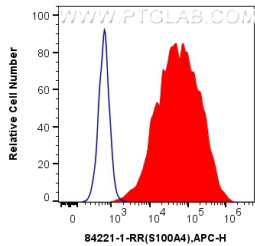
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using S100A4 antibody (84221-1-RR, Clone: 241448A12 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



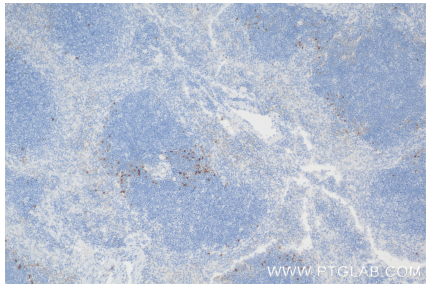
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84221-1-RR (S100A4 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



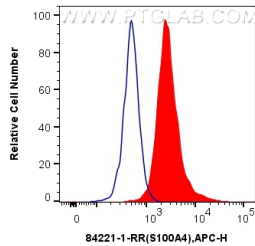
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84221-1-RR (S100A4 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



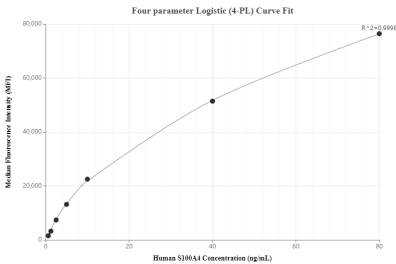
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug S100A4 Recombinant antibody (84221-1-RR, Clone:241448A12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



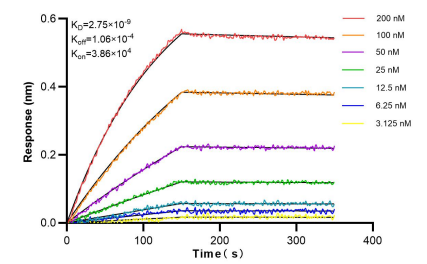
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 84221-1-RR (S100A4 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> Jurkat cells were intracellularly stained with 0.25 ug S100A4 Recombinant antibody (84221-1-RR, Clone:241448A12) and APC-Conjugated 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. This data was developed using the same antibody clone with 84221-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01155-2, S100A4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84221-2-PBS. Detection antibody: 84221-1-PBS. Standard: Ag9019. Range: 0.625-80 ng/mL.



Bi-layer interferometry (BLI) kinetic assays of 84221-1-RR against Human S100A4 were performed. The affinity constant is 2.75 nM.