## For Research Use Only

## S100A4 Recombinant antibody

Catalog Number:84221-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

84221-1-RR BC016300 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 6275 Nanodrop: ENSEMBL Gene ID: ENSG00000196154 Rabbit **UNIPROT ID:** 

Isotype: P26447 IgG Full Name:

Immunogen Catalog Number: S100 calcium binding protein A4

AG9019 Calculated MW:

101 aa, 12 kDa Observed MW: 10-12 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB: A549 cells, HeLa cells, NIH/3T3 cells, C6 cells

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:200-1:800

CloneNo.:

241448A12

IF/ICC: HeLa cells,

## **Background Information**

 ${\tt S100A4} is a member of the {\tt S100} family of calcium-binding proteins. The {\tt S100} family members have been involved and the {\tt S100} family member of the {\tt S100} family of {\tt$ 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 inpatients with various types of cancer.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

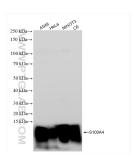
Aliquoting is unnecessary for -20°C storage

Storage Buffer:

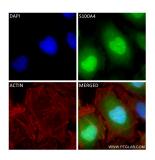
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

\*\*\* 20ul sizes contain 0.1% BSA

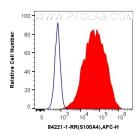
## **Selected Validation Data**



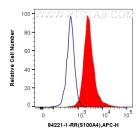
Various lysates were subjected to SDS PAGE followed by western blot with 84221-1-RR (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



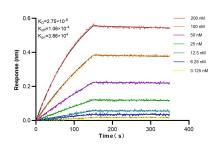
Immunofluorescent analysis of (4% PFA) fixed Hela cells using \$100A4 antibody (84221-1-RR, Clone: 241448A12 ) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit  $\lg G(H+L)$  (\$A00013-2), CL594-Phalloidin (red).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug \$100A4 Recombinant antibody (84221-1-RR, Clone:241448A12) and APC-Conjugated Goat Anti-Rabbit | gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10^6 Jurkat cells were intracellularly stained with 0.25 ug \$100A4 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 (PF00011-C).



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